

**EIGHTH
FIVE YEAR PLAN
(1993-98)**

**GOVERNMENT OF PAKISTAN
PLANNING COMMISSION
JUNE, 1994**

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INTRODUCTION

Pakistan is steering its economic and social development within the framework of medium term (5 year) plans. These plans are set in a longer term perspective of 15 years and are operationalised through the instrument of annual plans.

2. *The Seventh Plan (1988-93) commenced on 1st July, 1988 and terminated on 30th June, 1993. The Eighth Plan (1993-98) commenced with the Annual Plan 1993-94 and has been formally launched after the approval of the elected government accorded on 31st May, 1994.*

3. *The framework of the Eighth Five Year Plan was prepared in consultation with the federal agencies and the provincial governments. The findings and recommendations of 28 Technical Committees comprising over 2500 experts from public and private sectors set up in connection with the preparation of the Eighth Plan have been taken into consideration in formulating the Plan. It reflects the initiatives and incorporates the policies of the government geared to a dynamic and equitable economic system. The Plan is indicative of the priority attached to social sectors, energy, drainage and physical infrastructure. In terms of management systems, it underscores public - private partnership, and empowerment of the community and lower echelons of the Government.*

4. *The features that characterize this endeavour include a sharper focus on policy initiatives, on the management system, the need for selectivity in sectoral programmes and an express recognition of the fact that consolidation and rehabilitation of the physical and social infrastructure is as important as new investment. The dispensation of public expenditures is thus integrated with policy, with management improvement and the productivity of resource use. We hope this effort would be well-received.*

SAEED AHMAD QURESHI
Deputy Chairman

June 1994

Landmarks of Eighth Plan (1993-98)

I - Plan Size

	<i>(1992-93 Prices)</i>		<i>(Billion Rupees)</i>
	Public Sector	Private Sector	Total
7th Plan	553	596	1149
8th Plan	752	949	1701
Acceleration (%) (Real Terms)	36	59	48

Public Sector Programme

	<i>(Billion Rupees)</i>		
	Budget	Corporate and Market Financed	Total
7th Plan	457	96	553
8th Plan	483	269	752

II- Growth Targets

GDP	7.0%
Agriculture	4.9%
Manufacturing	9.9%
Services	6.7%

III - Macro-economic Management

1. Achieve the growth targets in a framework of equity, stability and sustainability.
2. Reduce overall fiscal deficit to half - from 7.9%* of GDP to 4% of GDP.
3. Reduce current account deficit from \$ 3.7* billion to \$ 1.84 billion -from 7% of GDP to 2.4%.
4. Long-term external debt to remain at 36% of GDP. Monetary expansion below growth of nominal GDP.
5. Retirement of high cost debt by utilization of privatization proceeds.
6. Introduce legislative control on budget deficit.
7. Reduce inflation rate from 9.3% to 6%.
8. National savings to GDP ratio to rise from 13.6% to 18%.
9. Generate 6.2 million new jobs (against 3.2 million in Seventh Plan).

*1992-93 actuals. In the Plan normalized benchmarks for 1992-93 are used.

IV - Good Governance

1. Reduce imbalances of regions, gender, groups, classes.
2. Measures for poverty alleviation:-
 - Long term - through Social Action Programme and employment generation.
 - Short term - through specific relief under Zakat, Baitul Maal and Social Welfare Systems.
3. Ensure equality of opportunity through merit, transparency, access to education, access to health care, employment (particularly self employment) and vertical mobility.
4. Greater self-reliance in financial resources.
5. Mitigate the heritage of collusion and default, conspicuous consumption and drug addiction
 - Decisive action against defaulters of tax, bank loans, and utility bills.
6. Improve efficiency, responsiveness and participation in the management of the economic system, through deregulation, accountability and empowerment of the rural communities, NGOs and lower echelons of Government.
7. Promote:
 - Public - Private Partnership
 - Devolution and decentralization particularly to the district level.

V - Towards Competitive Markets

1. Lower tax rates and broaden tax base, ensure documentation of the economy, improve tax compliance.
2. Curtailment of special concessions and rent-seeking activities.
3. Lower tariff structure, and integration with the World economy.

VI - Private Investment

1. Improve enabling environment through
 - adequacy of services and physical infrastructure
 - education and training
 - better health coverage
 - strengthening of capital markets
 - deregulation and privatization
2. Supportive policies in the fiscal, monetary, foreign exchange and trade regimes.
3. Ensure a minimum investment of Rs. 949 billion against Rs. 596 billion in the 7th Plan (1992-93 prices).

59% acceleration in real terms.

VII - Sectoral Targets

Social Sectors

Education and Training

1. Breakthrough in primary participation rate:-
Boys from 85 % to 95 %.
Girls from 54 % to 82 %.
2. Increase literacy rate from 35 % to 48 %.
3. Output of technicians to increase by 50 % - from 85,000 to 127,000 per annum.
4. Qualitative improvement in the education system.

Health

1. Engage 33,000 village health workers - First major effort for health extension at the village level.
2. Full immunization of mother and child.
3. Coverage of preventive services to be raised from 80 % to 90 %.
4. Life expectancy to go up from 61.5 years to 63.5 years.
5. Infant mortality rate to decline from 8.6 % to 6.5 %.
6. Control of micro-nutrient deficiencies.
7. Reduction of incidence of low birth babies from 25 % to 15 %.
8. Universal access to iodized salt for edible purposes.

Population

1. Population Planning coverage to increase from 20% to 80%.
 - urban 54% to 100%
 - rural 5% to 70%
2. Contraceptive prevalence to be doubled - from 14% to 28%.
3. Population growth rate declines from 2.9% to 2.7%.

Rural Water Supply & Sanitation

1. Coverage of rural water supply to increase from 47% to 71% of population.
2. Rural sanitation coverage to go up from 14% to 32%.

Physical Infrastructure

Water

1. Complete Chashma Right Bank Canal.
2. Complete Pat Feeder Canal.
3. Complete Left Bank Outfall Drain.
4. Visible Progress on Right Bank Outfall Drain.
5. Water logging in the disaster areas to be eliminated (1.40 million hectares).

Energy

1. Construction of Ghazi Brotha Hydel Power Project (1450 (MW).
2. Thermal generation in private sector (All new projects - estimated capacity 2500 MW).
3. Completion of ongoing Hub Power Project in private sector (1290 MW).
4. Privatization of thermal plants of WAPDA.
5. Power generation capacity up by 68% (from 9786 MW to 16422 MW).
6. Oil production up by 106% (from 60000 to 123,300 barrels a day) with major investment expected from private sector.
7. Gas production up by 38% (from 1855 to 2554 MMCFD peak).
8. Refining capacity up by 183 percent (from 6 million to 17 million tons per annum).
9. Significant utilization of Thar Coal. (Total estimated deposits: over 100 billion tons)
10. Electrification of 19700 villages.

Transport & Communication

1. Double rail track from Lodhran to Peshawar (800 Kms).
2. Manufacture of 1367 High Capacity Wagons.
3. Complete Indus Highway (1189 Kms).
4. Complete dualisation of National Highway (N-5) (1764 Kms).
5. Complete Lahore - Islamabad Motorway.
6. Improvement and upgradation of RCD Highway (N-25 and N-40).
7. Initiation of work on Makran Coastal Road.
8. Construction of deep sea port at Gwadar through Private Sector.
9. Clear all pending demand for telephone connections (2.5 million new lines - depicting 125 % increase in telephone access).
10. Number of post offices to rise from 13513 to 18513.
11. Work on Lowari Tunnel will be initiated.

Production Sectors

Agriculture

A: Policies

1. Integrated management of agriculture, irrigation and drainage.
2. Shift of emphasis to resource use efficiency - particularly input management and research linkages. Enhancing crop production by improving efficiency of inputs and research.
3. Better soil management, improved response to fertilizer use.
4. Introduction of sprinkler and trickle irrigation.
5. Breakthrough in oil seeds and pulses.
6. Integrated Pest Management.
7. More emphasis on non-crop sector.
8. Establishment of Kisan Banks.

B. Production Targets

- Wheat production up by 22% (from 15.0 million tons to 18.25 million tons).
- Cotton production up by 61% (from 9.3 million bales to 15 million bales).
- Rice production up by 31% (from 3.25 million tons to 4.25 million tons).
- Sugarcane production up by 28% (from 36 million tons to 46 million tons).
- Non conventional oil seeds production up by 108% (from 120 thousand tons to 250 thousand tons).
- Meat production up by 38% (from 1.8 million tons to 2.5 million tons).
- Milk production up by 30% (from 17 million tons to 22 million tons).

Industries and Minerals

Policy Initiatives

1. Breakthrough in small scale sector and improving linkage will large scale sector.
2. Major shift to value-added products. Improved production quality and marketing.

Production Targets

- Fertilizer (Nitrogen) production up by 60% (from 1.23 million N.Tons to 1.97 N.Tons).
- Cement production up by 66% (from 8.56 million tons to 13 million tons).
- Sugar production up by 54% (from 2.4 million tons to 3.7 million tons).
- Petroleum products up by 50% (from 7.6 billion litres to 11.4 billion litres).
- Steel Billets production up by 124% (from 246 thousand tons to 550 thousand tons).
- Tractors production up by 137% (from 712 thousand to 1686 thousands tons).
- Bicycles production up by 61% (from 5.8 million to 9.3 million).
- Trucks and buses up by 100% (from 4000 to 8000).
- Saindak Copper Project would be in production. Capacity 15850 tons of blisters copper, 1.47 tons gold and 2.76 tons of silver.

PART-I

PERSPECTIVE AND BASIC FRAMEWORK

(1—2)

I-1

PERFORMANCE OF SEVENTH PLAN

The Seventh Five Year Plan was prepared within a broad based socio-economic framework of a fifteen years perspective (1988-2003), emphasizing efficient growth in output on one hand and improving the quality of life on the other. Of the Perspective Plan total incremental targets, about 23.6 percent of GDP, 22 percent of investment, 23.8 percent of exports, 26.2 percent of imports and 21 percent of revenue, were envisaged to be attained during the Seventh Plan. It attempted to address the deficiencies in social sectors, education, health, women development etc. as well as economic problems like fiscal and current account deficits, inflation and unemployment. Many policy reforms were launched during the Plan period and a new economic edifice based on free enterprise, open market, privatization, deregulation and liberalization has been raised.

2. The tempo of growth was affected by unforeseen events on domestic and international fronts including economic contraction of Eastern Europe and the former Soviet Union, recession in Pakistan's export markets, the Gulf War, the delay in the settlement of the Afghan issue, the political uncertainties on the domestic front, frequent changes of government, civil disturbances in 1989-90 and floods of 1988-89 and 1992-93. However, the overall performance has been satisfactory.

Growth Performance

3. The growth performance though below the plan target, was in line with the historical trends, and satisfactory in the context of internal and external constraints. GDP grew by 5.0 percent (target 6.5%), agriculture 3.8 percent (target of 4.7%), manufacturing 5.9 percent (target 8.1%) and other sectors 5.3 percent against the target of 6.7 percent. In aggregate terms over 74 percent of the incremental output targets were achieved. However, self-reliance in the production of wheat, edible oils, iron-ore, crude oil and capital goods did not show a significant improvement.

Macro-Economic Framework

4. The fiscal scenario conceived in the Plan did not materialize. Targets relating to additional resources and control of current expenditures were not achieved. The trend of fiscal deficit has been as follows:-

Years	percent of GDP
1988-89	7.4
1989-90	6.5
1990-91	8.7
1991-92	7.5
1992-93	7.9

5. As a consequence of deficits, the domestic debt more than doubled during the Plan period, rising from Rs 290 billion in 1987-88 to Rs 605 billion in 1992-93.

6. The annual growth in monetary assets at 15.2 percent was higher than the Plan target of 12.5 percent but close to the nominal growth of GNP at 14.9 percent. Domestic credit increased to Rs 326.7 billion - well above the Plan estimate of Rs 179.9 billion. Government credit expanded to Rs 190.6 billion against the target of Rs 64.2 billion. This was due mainly to increase in budgetary support, which reached Rs 175.6 billion against the Plan target of Rs 51.7 billion.

7. Fortunately, the "crowding out" effect in credit allocation was restrained reflecting the emphasis on private investment. Credit utilization was Rs 155.5 billion against the Plan allocation of Rs 115.2 billion.

8. On the external side the current account deficit rose from \$ 1.68 billion in 1987-88 to \$ 3.69 billion in 1992-93. This was mainly a result of deterioration in the invisibles i.e. fall in remittances and increase in service payments. As a corrective measure rupee exchange rate was brought close to the market value. The dollar - rupee exchange rate went up from Rs 18.12 per dollar in July 1988 to Rs 27.15 per dollar in June 1993.

9. The performance on investment front has been encouraging. Against the gross domestic fixed investment target of Rs 660.2 billion, the actual investment (1987-88 prices) amounted to Rs 682 billion; with private investment exceeding the target by about 19.6 percent while the public investment experienced a shortfall of 9.6 percent.

10. For the public sector development programme, the Seventh Plan had provided an outlay of Rs 350 billion at 1987-88 prices. The actual expenditure is estimated to amount to Rs 321.4 billion, showing an achievement of 91.8 percent.

Economic Structure

11. The Plan marks a distinct change in the economic structure. Spurred by a steady growth in line with the earlier Plans, the industrial sector increased its share of total output steadily, surpassing agriculture for the first time. Since the First Plan, the share of industrial sector in G.D.P. has gone up from 15 percent to 26.7 percent and services sector from 38 percent to 49.5 percent while agriculture has gone down from 46.6 percent to 24.5 percent.

Sectoral Picture

Agriculture

12. The thrust of plan was on the achievement of self-sufficiency in basic food items and improvement in productivity through efficient use of inputs and credit. The farmers were to be provided remunerative support prices. Research and extension were to be strengthened.

13. Policy measures to improve agricultural productivity and income of the farmers were introduced. A Productivity Enhancement Programme (PEP) was launched. A relief package on outstanding loans was announced. Liberal credit facilities were provided. Import duties on agricultural implements including tractors were reduced. The farmers were also provided adequate return for their produce through support prices. In order to boost the export of fruits and vegetables, rebate of 25 percent was announced on freight on national carriers. Comprehensive programmes were also planned for afforestation, watershed management, range management and resource conservation.

14. Financial outlay on agriculture was Rs 7.552 billion at 1987-88 prices against the PSDP allocation of Rs 8.167 billion indicating 92.5 percent utilization. The subsidy on fertilizer was Rs 4.971 billion against the plan allocation of Rs 3.3 billion. Besides the public sector development outlay, the private sector invested Rs 51.6 billion at 1987-88 prices in the agriculture.

15. The growth rate was 3.8 percent against the plan target of 4.7 percent. The shortfall is mainly due to the setback on account of devastating floods in 1988-89 and 1992-93. There was a remarkable increase in cotton production during the plan period. Its production increased to 12.8 million bales in 1991-92, but decreased to 9.1 million bales in 1992-93 due to floods and leaf curl virus. However, on the basis of five year total the output targets of cotton, sugarcane, potato and onion were exceeded while those of wheat, maize and rice were achieved to the extent of 99 percent, 90.5 percent and 83.9 percent respectively. On the other hand substantial shortfall was experienced in the output of non-traditional oil seeds, gram and rapeseeds and mustard. The overall growth performance of the livestock sub-sector was 5.8 percent against the target of 5.3 percent.

Manufacturing

16. The value-added in manufacturing increased by 5.9 percent against the target of 8.1 percent a year. The entire shortfall from the target is attributed to the large-scale manufacturing sector which could only attain a growth rate of 4.9 percent against the target of 8.0 percent. The short fall can be attributed to law and order situation, infrastructural constraints, delays in the commissioning of new projects, non availability of raw material and a world-wide recession.

17. The Production targets of motor tyres, sugar, soda ash, caustic soda, cotton yarn cotton cloth, trucks and buses were achieved and in a few cases exceeded, while shortfall was experienced in the production of vegetable ghee, cement, nitrogenous fertilizer, steel billets, rolled sheets, cigarettes, tractors, papers, bicycles and petroleum products. Growth of engineering and capital goods industries was far below the expectations.

18. A sum of Rs 10.07 billion was allocated to various Public Corporations in the manufacturing sector, for BMR and creation of new capacities. Most of the planned projects were completed by the end of the 7th plan.

19. Financial utilization under the PSDP in the manufacturing sector reached to Rs 6.352 billion against the target of Rs 10.07 billion reflecting 63 percent utilization. Out of the utilization of Rs 6.352 billion, Rs 1.186 billion were utilized through the budgetary development programme and the remaining Rs 5.116 billion from Public Corporations Programme indicating 12.0 percent and 51.0 percent utilization of the budgetary and corporate resources.

20. Against the investment target of Rs 87.5 billion in the manufacturing sector (at constant prices of 1987-88), the private industrial investment amounted to Rs 145.3 billion at 1987-88 prices. Foreign private investment in the manufacturing sector was Rs 27 billion against the target of Rs 26 billion at 1987-88 prices.

Mineral

21. The Seventh Plan placed great emphasis on enlarging the production base of mineral sector through rapid expansion of local and foreign investment.

22. During the 7th Plan period different collaborative development projects were started. These projects have helped in the training of GSP, PMDC and RDC personnel.

23. The Seventh Plan allocated Rs 7.012 billion (Rs 3.122 billion from the budget and Rs 3.89 billion from the Corporations Programme) for the development of mineral sector. An amount of Rs 1.597 billion (at constant prices of 1987-88) has been utilized against the budgetary provision of Rs 3.12 billion.

Rs 0.625 billion has been utilized against the target of Rs 3.89 billion in the public corporations programme. Besides the Public Sector, Private Sector invested Rs 0.903 billion in the mineral sector.

Energy

24. Expeditious development of indigenous resources, comprehensive energy pricing policy and conservation of energy were the main ingredients of the energy strategy.

25. Oil extraction in the country has increased from 44684 barrels per day during 1987-88 to 60,000 barrels per day in 1992-93 against the target of 76000 BPD showing 79 percent achievement. About 217 wells were drilled during the plan period against the target of 375 showing 57.9 percent achievement of the target.

26. As regards gas, the production (average) increased from 1200 MMCFD to 1598 MMCFD. About 700,000 new gas connections were provided during the 7th Plan.

27. LPG production was only 303 tones/day against the plan target of 518 tones/day indicating only 59 percent achievement.

28. Total installed capacity for power increased from 6794 MW to 9786 MW. Number of the additional villages electrified was 17,447 against the plan target of 10336 showing 169 percent achievements. A total of 2.7 million new electric connections were provided during 7th Plan period.

Rural Development

29. For the development of rural areas, a comprehensive programme involving an outlay of Rs 112.2 billion was envisaged in the Plan. For this purpose about 9000 K.M. roads were constructed under the rural/farm-to-market roads programme against the Plan target of 8500 K.M. Under the People's Programme, 18507 schemes relating to different sectors were approved during the period from March 1989 upto 6th August 1990. Similarly, under the Tameer-e-Watan Programme, initiated in October 1991, about 32971 schemes comprising rural roads, repair of school buildings, street drainage, water supply, village electrification, health facilities, community centres, grave yards and construction of bridges etc, were approved upto June 1993.

30. Under rural education, about 9750 mosque and 18900 primary schools were constructed against the target of 15,000 mosque and 31152 primary schools. Besides, 3780 primary and 1950 middle schools were upgraded to middle and high levels respectively against the target of 5850 primary and 2775 middle schools.

31. In the rural health sub-sector, 1660 BHUs and 106 RHCs were established against the Plan target of 1882 and 121 RHCs. Under the rural water and sanitation programme, 20 million additional population was supplied drinking water against the target of 31 million. Sanitation facilities were provided to 11 million additional people against the target of 17 million. Against the target of 10336 villages/abadis, 17447 villages/abadis were electrified showing an achievement of 169 percent.

Regional Development

32. The areas which are included in the regional development plan are Azad Kashmir, Northern Areas and the Federally Administered Tribal Areas which share certain common geo-physical location and economic characteristics. During the plan period, an amount of Rs 13.2 billion at 1987-88 prices was allocated for the special areas out of this Rs 8.75 billion at 1987-88 prices were utilized showing utilization of 66.3 percent. Rs 5.2 billion were allocated for Azad Kashmir against which an amount of Rs 3.5 billion were utilized. Northern Areas were provided Rs 2.7 billion out of which Rs 2.05 billion were utilized. Against an allocation of Rs 5.3 billion for FATA and FATA/DC an amount of Rs 3.2 billion were utilized.

Transport & Communications

33. The Seventh Plan catered for the rehabilitation of assets and a modest expansion in the capacities of the Road, Railways and Port sub-sectors. The Plan envisaged improvement in rail/road traffic ratio from 20:80 in 1987-88 to 26:74 in 1992-93 through allocating long lead freight traffic to Railways and short lead traffic to roads. Induction of private sector in highway development, shipping, roads construction, domestic aviation services and telecommunications was also envisaged. Resurfacing and maintenance of highways and development of port facilities for container traffic were to be undertaken. Besides modernizing Karachi shipyard and engineering works, possibilities of developing existing river and land networks for inland navigation from Port Qasim to Kalabagh and Lahore were to be explored.

34. Major railway's projects completed during the Plan included Locomotive Factory at Risalpur, manufacturing of 158 passenger coaches, recommissioning of 37 DE locos, procurement of 5 DE locomotives as well as Rail renewal of 298 Kms. and sleepers renewal of 357 Kms. Freight traffic, however, did not increase primarily due to operational inefficiency.

35. The highway sub-sector was given a major thrust. National Highway Board (NHB) was converted into a National Highway Authority (NHA) and given larger powers. Among the major projects, work on the upgrading and improvement of the Indus Highway (National Highway N-55) as the alternate North-South link on the West Bank of River Indus and dualization of 537 KM of

National Highway N-5 under the Fourth Highway Project funded by the World Bank was accelerated. A significant development was the launching of maintenance oriented projects under the development budget namely 'Maintenance Backlog Reduction' and 'Resurfacing and Strengthening' programmes. These projects, prepared to overcome the problem of shortage of maintenance funds were financed by the World Bank under the Transport Sector Loan. Efforts to induct private sector in highway construction did not materialize. Work on the motorway between Lahore-Islamabad was initiated, about 7329 Kms of new roads were constructed and 8237 Kms of existing roads improved.

36. The on-going project of Port Qasim (phase-I) was almost completed. Gwadar Fish Harbour and the Miniport were also completed.

37. In Civil Aviation, two major projects viz, new terminal complex at Karachi and Aeronautical communications and control (AC&C) system were completed and old runway at Lahore Airport upgraded for Airbus A 300 B4 operations. The PIA acquired four Airbuses A310-300, 4 used Fokker F 27 Aircrafts during the plan period. Domestic traffic carried by PIA fell short of the plan target while international traffic carried by it exceeded the plan target. Private sector was inducted in Airline business.

38. The installation of 1,128,000 new telephone lines was close to the target of 1,150,000 new lines, indicating an achievement of 98.1 percent. Private sector which was inducted in telecommunications on Built Lease and Transfer (BLT) basis installed 500,000 telephone lines during the plan period. T&T Department was converted into Pakistan Telecommunication Corporation (PTC).

39. An investment of Rs 26.654 billion (at 1987-88 prices) in the Federal and provincial Public Sector and Rs 39.569 billion for the Public Sector Corporation was made against the plan allocation of Rs 29.2 billion and Rs 32.30 billion respectively. During the plan period Rs 27.368 billion and Rs 28.786 billion was utilized for the Federal and Provincial Public Sector and Public Corporations programmes. Utilization stood at 93.7 per cent and 89.12 per cent in the Federal Public Sector and the Public Sector Corporation respectively. The over all utilization was 91.3 per cent.

Irrigation and Drainage

40. During the 7th Five year Plan anti water-logging and salinity control programme was given a high priority.

41. Work on Chashma Right Bank Canal on Phase-II and Pat Feeder Canal Rehabilitation Projects was under taken. About 5,500 tubewells were installed on annual basis in the private sector. Besides, many small irrigation schemes were executed. As a result, 1.53 MHM additional water, irrigating additional cultivable land of 1.012 million hectares became available.

42. To conserve irrigation water, Irrigation System Rehabilitation Project-II, Command Water Management and On-Farm Water Management Programmes were implemented. The Command water Management Project and Phase-II of the On-Farm Water Management (OFWM) Programmes have been completed and Phase-III dovetailed with phase-II. Physical accomplishments included renovation of 10,000 water courses and levelling precisely 128932 acres (52178 hectares) of land.

43. About 11 SCARPS and a Pilot SCARP Transition Project in Punjab have also been completed, which would protect 2.13 MA (0.86 MHA) of disastrous areas.

44. A sum of Rs 21.5 billion (at 1987-88 prices) was utilized during the 7th Plan against the Plan allocation of Rs 28.4 billion reflecting 75.7 percent utilization. Utilization of ADP allocation has, however, been estimated at 105 percent (at current prices).

Science & Technology

45. The main goals of the sector were to promote productivity and competitiveness in agriculture and industry, and to enhance the efficiency of transport, energy, health and other sectors by giving boost to technological development efforts and R&D activities.

46. The Seventh Plan could not achieve fully the integration of Science and Technology with development plans and production sectors. Some progress, however, was made in improving the infrastructure equipment and other facilities in institutions like PCSIR, PCAT, PCRWR, etc. Some potential revenue generating projects have been started by NIO, PCSIR, NCTT, CAMB, NIE, PARC, HDIP, NIH and SUPARCO etc which is a beginning towards self-financing of activities of Science & Technology sector. No attractive incentives were given to the private sector to encourage investment in R&D.

47. Under the human resources development programme 877 scholars were sent abroad for higher studies leading to Ph.D in hi-tech fields to overcome the dearth of the technical competence. During Plan period 262 scholars completed their studies while 252 returned to Pakistan.

48. A sum of Rs 2.25 billion was allocated to Science and Technology against which the estimated expenditure is Rs 1.61 billion (at 1987-88 prices).

Education & Training

49. In 1987-88 prices the total expenditure of education sector programmes was Rs 19.0 billion against the plan allocation of Rs 23.11 billion. Thus in real term the overall financial expenditure has been 82 percent, of the Plan allocation. Consequently there have been short-falls in the achievement of physical targets. Some of the important policy initiatives proposed in the Seventh Plan could not be implemented. At primary level, about 21,000 primary and 13,000 mosque schools were established against the target of 34,613 primary schools and 20,000 mosque schools. Buildings were constructed for 16,500 shelterless schools against the target of 20,075. About 13,000 class rooms were added in the existing primary schools against the target of 8,750. About 3.1 million additional children (including 1.5 million girls) were enrolled at the primary level against the Plan target of 4.6 million (including 2.7 million girls). Major reasons for shortfall of about 32 percent in the additional enrolment can be attributed to socio-economic factors that inhibit the low income families from sending their children to the school, high drop out rate and non-enactment of compulsory primary schooling legislation proposed in the Seventh Plan.

50. During the Plan period, about 4,201 primary and 2,600 middle schools were upgraded to middle and secondary level against the target of 6,500 primary and 3,700 middle schools respectively. Besides 110 new high schools were established, Intermediate classes were added in more than 368 secondary schools respectively. Two million additional students were enrolled at secondary level in classes VI-X against the target of 1.88 million. In quantitative terms about 100 percent of the enrolment target has been achieved but much remains to be done for improving quality and relevance of secondary education.

51. Some headway was made towards diverting students to technical and vocational streams. Towards this end works were started on establishment of 29 poly-technics and only 4 of them were completed. Work on the remaining institutions is expected to be completed during the Eighth Plan.

52. The Seventh Plan period also witnessed a number of initiatives of managerial nature for the acceleration of educational development. These include:

- i) Education Foundations were established for encouraging the private sector's participation in the establishment of new educational institutions on non-commercial basis, particularly in the rural areas.

- ii) The "Tameer-e-Watan" programme was launched. Under this programme, legislators identify the immediate needs of the people at the grass-roots level (including, most prominently, education) and develop projects for implementation through normal channels under their supervision.
- iii) Foreign assistance for education sector was made available to the provinces over and above their normal ADP shares.
- iv) The pay scales of school teachers were upgraded by one step, and the upper age limit for appointment of primary schools teachers was relaxed.
- v) The Social Action Programme (SAP) was launched in 1992-93 to accelerate integrated development of social sectors. Basic education, including primary education, functional literacy, and female education, forms the largest component of the Social Action Programme.

Health

53. Against the Plan target of 1,882 Basic Health Units 1,660 units were established reflecting 88.2 percent achievements. 106 Rural Health Centres were set up against the target of 121 reflecting 87.6 percent achievement. Only 50 Urban Health Centres against the target of 227 were established.

54. Against the target of 16,252 Hospital beds, 12,006 Hospital beds and 17,528 doctors against the target of 17,535 were added. Against the target of 800 dentists and 10,240 Nurses, 775 Dentists and 8,768 nurses were achieved. Similarly, 21,259 para-medics against the target of 35,950 and 26,635 TBAs against the target of 27,150 were trained.

55. 16.8 million children were immunized against the target of 18.8 million, and about 43.3 million Packets of ORS against the target of 50.4 million Packets were distributed.

56. Financial utilization of Rs 10.0 billion under PSDP against the allocation of Rs 12.8 billion for health sector is about 78.1 percent

Women Development

57. The Ministry of Women Development sponsored a variety of small projects for women development in collaboration with Federal and Provincial Line Departments and NGOs. These projects included community/welfare centres, dispensaries, eye units, gyne wards, day care centres, working women hostels, industrial homes, training centres, water supply schemes, women cooperatives, darul falah/amans, legal aid centres, credit schemes, literacy/education centres,

libraries, strengthening of female educational/technical institutions, grant-in-aid for women programmes and NGOs. Special credit facilities for women were arranged through the First Women Bank.

58. Against the Plan allocation of Rs 900.0 million, total utilization is estimated to be Rs 648.493 million (at 1987-88 prices) indicating 72 percent utilization rate.

Population and Social Planning

59. The main objective of Population Welfare Programme during the Seventh Plan was fertility management by voluntary birth intervals and birth preventions through multi-sectoral activities as well as maternal & child health system. Public, private, NGO and commercial sectors were involved in service delivery.

60. Birth prevention target for Seventh Plan was 3.17 million. The programme achieved 73 percent targets by preventing about 2.31 million births. The foregoing birth prevention was achieved by establishing 1,505 service outlets, involving 3,168 public sector health outlets (federal and provincial), 580 outlets of non-Governmental Organizations (NGOs) and 5,000 Traditional Birth Attendants (TBAs), 2,500 Registered Private Medical Practitioners, and 4,000 Hakeems and Homoeopaths. The programme also established 67,000 sale points in the commercial medical/drug stores through the project entitled "Social Marketing of contraceptive (SMC)".

61. The Seventh Plan provision for the programme was Rs 3.535 billion and total PSDP allocation amounted to Rs 3.040 billion at 1987-88 prices. The programme however, utilized an estimated amount of Rs 3.047 billion which is 100 percent of the PSDP and 86 percent of the Plan allocation.

Employment and Manpower

62. Initial employment projections of the Seventh Plan indicated substantial increases in unemployment in the form of open unemployment and under employment. In view of low elasticity of employment with respect to GDP growth, the Plan emphasized promotion of relatively more labour intensive sectors to alleviate the expected unemployment pressures. For this purpose, the Seventh Plan postulated a 10-point strategy expected to generate 6.1 million jobs.

63. Most of the provisions of the 10-Point Strategy could not be made effective during the first three years. Several factors were responsible for this. First, there was some delay in the preparation of policies and projects. Second, political developments inhibited continuity of policy and development programmes; Third, reduction in the foreign aid prevented undertaking of new programmes. Employment situation deteriorated during the first three years.

64. According to rough estimates, about 3.122 million additional jobs were created against the 7th Plan target of 6.1 million, reflecting about 51.2 percent achievement.

65. The Seventh Plan allocated Rs 2.56 billion for the development programmes in the manpower sector, against which Rs 1.074 billion or 41.8 percent were actually spent. Low utilization is mainly due to weak resources position and implementation capability of the sector.

Culture, Sports and Tourism

66. The Seventh Plan followed an integrated approach towards cultural development covering all important dimensions like preservation of cultural heritage, historical and archaeological research, cultural history, anthropology, arts and crafts and architecture. Major portion of PSDP allocation provided for archaeology and archieves was spent on preservation of Mohen-jo-daro Monuments. The renovation of Quaid-i-Azam house and archives building phase 1 were completed. The physical work on construction of 2 spurs reached advance stage while ground water control works of Mohen-jo-daro monuments brought down the water level to 30 ft. Malam Jabba skiing resort was constructed. Work on Khirthar National Park in Sindh was near completion. The construction of new motels at Choa Saidan Shah, Khuzdar and Ayubia were completed by PTDC. Besides, extension work at the existing motels at Skardu, Ziarat, Gilgit, Besham, Khuzdar and Texila were also completed. Moreover, road side facilities at Barseen on KKH were commissioned. An amount of Rs 74.64 million were spent for youth development programme. About 85 youth skill development centers all over the country and three youth hostels at Quetta, Peshawar and Islamabad were completed, a sport stadium at Hasilpur was also constructed. Similarly, museum galleries at Lok Virsa, Islamabad were completed. However, there was no worthwhile progress in the construction of International Conference Hall, Cultural Heritage centers at Multan, Quetta, Peshawar and Sehwan Sharif and National Art Gallery.

Mass Media

67. The Seventh Plan aimed at expanding the coverage through radio and television to the entire population. The major completed project during the plan was the 2nd television channel under a Japanese grant of Rs 507 million and government support of Rs 119 million. Besides, technical and production facilities at Karachi, Lahore and Islamabad TV centers were also completed. A adequate funds were not available for the radio sub-sector. As a result short-wave transmitters could not be added. Only one 300 KWMW transmitter at Khuzdar brought a sizeable area of Baluchistan under radio coverage. Moreover, two new small power transmitters at Gilgit and Faisalabad and village broadcasters at Sibi, Chitral and Abbottabad were added. Besides, APP replaced 58 old teleprinters, and modernized the news gathering system.

Physical Planning & Housing

68. The 7th Five year Plan aimed at reducing gap between demand and supply of houses. Emphasis was given to the provision of houses to the shelterless and low income groups and meeting the basic needs of drinking water and providing sewerage and sanitation facilities.

69. Against the target of development of 650 thousands plots in urban areas, 630 thousand plots were developed. In rural areas 2.9 million 7-Marla plots were allotted to the low income shelterless against the target of 2.2 million. The target of improving the living conditions of Katchi abadis was achieved to the extent of 80 percent. As regards the provision of water supply/sanitation facilities in urban areas, the targets achieved were 85 percent (water) and 60 percent (sewerage) respectively. In rural areas, 50 percent population has access to water supply and 17 percent to sanitation facilities.

Social Welfare

70. The Seventh Plan while emphasizing expanding national production through development of physical resources ensured various policies, measures and necessary programmes in order to promote and enhance Social Welfare services for betterment of the physically, socially and economically handicapped population in the country. The Social Welfare programmes have been designed in a way that they help to harmonize the forces of social change and offset their adverse repercussions caused by total development processes. Zakat and Ushr system for helping the indigent and poor remained in operation. The policy to follow a collaborative effort of the Government and the Non-government Organizations (NGOs) in implementation of Social Welfare Programmes was enforced.

71. Around 300 Social Welfare Institutions were established during the Plan period. These institutions include 131 Social Service institutions (33 Federal & 98 Provincial) in various fields like child welfare, youth welfare, women welfare, community development, patient's welfare, staff welfare, welfare of the aged, etc. It also included 169 institutions for special education and rehabilitation services for the disabled persons (99 Federal and 70 Provincial). The social welfare sector was provided an amount of Rs 0.794 billion against which Rs 0.602 billion was utilised.

Conclusions

72. While the growth targets were not achieved, the overall performance was satisfactory. GDP grew at 5 percent a year, agriculture 3.8 percent and manufacturing 5.9 percent. Investment in fixed assets amounting to Rs 682 billion exceeded the target of Rs 660 billion due to a surge in private investment, which exceeded the target by 19.6 percent. Substantial advances were made in physical

infrastructure. Gas production increased by 34 percent and power generation increased by 44 percent. Rural electrification was well ahead of the target - 18,265 villages/abadis were electrified compared with the plan target of 10,336.

73. In the final year of the Plan, a Social Action Programme was launched to address the stubborn neglect of education, health, nutrition, rural water supply and sanitation and population planning. The focus of the programme is on women and rural development. It emphasizes improved delivery system and greater participation of the community.

74. In terms of macro economic framework, performance at the internal and external front was not upto the mark. The level of fiscal deficit rose from 6.5 percent of GDP in 1989-90 to 7.9 percent of GDP in 1992-93. There was a rapid build up of domestic debt which increased from Rs 290 billion in 1987-88 to Rs 605 billion in 1992-93, a mirror image of the growing deficits.

75. The developments in the Middle East and recession in Japan, Europe and America had an adverse effect on balance of payments. Current account deficit went up from 4.4 of GDP in 1987-88 to 7.1 percent in 1992-93. Rupee value was adjusted by 32.2 percent (cumulatively) against the dollar, but the position remained vulnerable, particularly during the Gulf crisis.

76. The structure of public expenditure depicted a shift to the corporate sector. The investment by public corporations went up from Rs 49.0 billion to Rs 69.8 billion in 1992-93 in response to larger autonomy and delinking from the budgetary process.

77. The economy went through a process of deregulation and liberalization. Foreign exchange regulation, sanctioning procedures for industrial units and trade policy were deregulated and liberalized. Price controls were removed and subsidies reduced. The process of rationalizing tariff structure was started.

78. Sector which were hitherto reserved for public sector were opened to private investment. These included power generation, telecommunications, shipping, airlines and export of rice and cotton. Parallel to this two banks and 63 industrial units were privatized. The process of deregulation and privatization is likely to be consolidated in the Eighth Plan.

I-2

PERSPECTIVE PLAN (1993-2008)

I. Introduction

It is desirable to develop a long term vision for the country based on the national objectives and aspirations of the people. Such a vision, should also take into account the likely global scenario, in an increasingly globalized world economy. The vision is generally enshrined in a Perspective Plan. However, given the uncertainties attached to even short term projections the Perspective Plan cannot be a blue print of action. It represents a distant profile of the economy and underscores the need for mid course corrections as warranted by a linear projection of current trends.

II. Perspective Plan (1988-2003)

2. The main purpose of the fifteen years Perspective Plan(1988-2003) was to provide a long term economic and social framework so that the objectives to be achieved over a much-longer period could be incorporated in the Seventh Plan. It was conceived more in the nature of setting distant guide posts than fixing specific targets.

3. The major development targets visualised in the Perspective Plan for the year 2003 were:

- Over two and a half times increase in GDP in real terms and about 60 percent increase in per capita income;
- Reduction in the rate of population growth from 3.1 percent in 1987-88 to 2.6 percent.
- Eradication of illiteracy among youth by the end of the Eighth Plan, through full enrollment of the primary age population;
- Access to clean water for the entire population;
- Access to sewerage facilities to all the urban areas and 60 percent of the rural areas;
- Provision of telephones to about 50 percent of the population;
- Increase in tertiary roads from about 80,000 km to about 140,000 kms against the estimated total requirement of 200,000 kms;
- Provision of a Rural Health Centre (RHC) for each Union Council;

- ensure child survival and safe motherhood;
- Expansion of modern health care facilities such as ambulances with a radio or radio links;
- Increase the installed capacity for power generation to fully meet growing demand; and
- Provide town development schemes, to accommodate the rapidly growing urban population.

4. Some progress has been made in moving towards these targets though not completely in line with the long term targets. In the Eighth and subsequent medium terms Plans attempt will be made to accelerate the pace to cover the shortfalls of the 7th Plan as well.

III. Perspective Plan (1993-2008)

5. With the formulation of the Eighth Five Year Plan, a fifteen years long term socio-economic vision of the economy is being evolved which will be concretised through medium term (five year) plans. The Perspective Plan (1993-2008) has been conceived in the light of (a) lessons from the past, (b) present policies of privatization, deregulation, and market orientation of the domestic economy, and (c) imperatives arising from the emerging global environment.

(a) Lessons from the Past:

- (i) Pakistan has maintained a respectable GDP growth but the gains were diluted by high population growth, restricting the rate of increase in per capita income at around 3% per annum. The acceleration of GDP growth must therefore be in tandem with reduction in the population growth.
- (ii) The benefits of growth have not been equitably shared by different regions and sections of society. Measures are needed to achieve better equity in growth.
- (iii) There has been persistent macroeconomic instability. Budget and balance of payments deficits have been large resulting in accumulation of debt both domestic and foreign. In the coming years, Pakistan must attain growth with macroeconomic stability. Otherwise there would be no significant progress towards self reliance.

- (iv) The neglect of social sectors has debilitated the economy. Attempts to up-grade social indicators constitute an integral part of the long terms perspective.
- (v) Physical infrastructure is inadequate and not properly maintained. To sustain growth, further development and better maintenance of physical infrastructure is needed.

(b) Current Policies:

Currently the economy is going through vital structural changes. It is open, de-regulated and market oriented. Public Sector enterprises are being divested. Private sector is being inducted in the areas of activities which so far have been the monopoly of the public sector. Long term sectoral policies and strategies have been devised, such as, National Conservation Strategy for environmental protection, Education Policy to attain universal literacy, Population Welfare Policies to reduce population growth, and Transport Policy to meet the growing future demand in this area, Energy Policy to clear the backlog of deficiencies, and Social Action Programme for human resource development. On the external side, import and payment regimes have been liberalized. Tariffs are being reduced and rationalized. These developments will change the complexion of the planning process. It will become more policy oriented, market friendly and indicative rather than imperative.

(c) Global Environment:

The beginning of the twenty first century will not only witness new scientific discoveries but also wider dispersal and use of technology, in particular in production and communications. This will make the world more competitive and interdependent. Many economies will be compelled to restructure themselves to face the challenges of competitiveness. The role of multinationals is likely to expand. Joint production and marketing arrangements among them will be a key factor. Existing regional groupings will be expanded. New arrangements, particularly in Asia, may emerge. The flow of official resources towards developing countries may contract and will be subject to stricter conditionalities. This would enhance the role of foreign private investment.

6. The future of world economy is being viewed with cautious optimism. It is predicted that in the next decade the industrial market economies, with careful management, should see a return of economic growth rate of 3 percent per annum and a real average growth in world trade of 5 to 6 percent. The prospect of

developing countries in Asia, are expected to be better than those in Latin America and Africa. The future of the Eastern European countries and former States of USSR hinges on how quickly they are able to restructure their economies and stabilize political and social conditions.

7. These anticipated global trends will make the task of planning and development difficult and challenging. Pakistan will have to steer its course in a competitive setting. The availability of external resources is likely to become difficult, costly and subject to strict conditionalities. However, the expansion of the Economic Co-operation Organization (ECO) and closer links with the Middle East and East Asia will enlarge the scope of mutually beneficial economic and trade relations. Pakistan will have to expand its industrial sector and improve industrial productivity and efficiency to enhance its exports share in the competitive world market. For this purpose, inflow of foreign private investment and transfer of technology would be essential.

A. Main Contours of Pakistan Economy in Year 2007-08

8. Against the background of above three elements, Pakistan is perceived as a moderate and modern Islamic state, politically stable and economically and socially developed with the following characteristics:

- i) Dynamic and robust in nature, depicting high growth.
- ii) Resilient against external shocks.
- iii) Competitive in production and proficient in technology.
- iv) Diversified base in agriculture and manufacturing.
- v) Macro economic stability in terms of financial balance and low inflation.
- vi) Self-reliance in food and investible resources.

9. The elements of social development may include the following:-

- i) Equitable distribution of gains from growth.
- ii) Economic opportunities for all on equal basis.
- iii) Parity of social services and infrastructure.
- iv) Human resource development.
- v) Sharp decline in absolute poverty.
- vi) Easy access to basic facilities of education, health, energy, telecommunications and other infrastructure, to entire community.

- vii) Good governance featuring stable democracy, freedom of expression, accountability and justice.

10. Quantitatively, the major indicative development targets of the Perspective Plan for the year 2008 are:-

- doubling the per capita income in real terms by increasing GDP by 175 percent;*
- reduction in the population growth rate from 2.9 percent to 2.3 percent;
- transformation of the economy with share of manufacturing sector in GDP rising from the current level of 18 percent to 25 percent.
- expanding investment level from 19.7 percent during Seventh Plan to 21.4 percent of GDP and share of national savings from 75 percent to 100 percent of investment;
- increasing the ratio of real exports to real imports from 77 percent to 132 percent and total foreign trade from 32.8 percent of GDP to 35.8 percent;
- reduction in dependency and external resources. Reducing in the long term external debt from 34.6 percent to 13.6 percent of GNP.
- creation of 20.0 million additional jobs and structural change in the pattern of employment with the share of the industry increasing from 19.0 percent in 1992 to 22.0 percent in 2008;
- universal primary education;
- literacy rate of 87 percent;
- accessibility of all population to primary health care;

*** Some economists have suggested doubling per capita income in 10-12 years but this will require a GDP growth rate of around 9 to 10 per cent per annum, an investment and saving effort equal to 25 to 30 per cent of GDP and larger investments in infrastructure and human resources development.**

- universal immunization;
- reduction in infant mortality rate from 86 to 30 per thousand;
- increase life expectancy from 61 to 67 years;
- provision of link roads to all villages;
- increase the density of telephones from 20.6 to 91 per thousand persons;
- provision of air transport facilities at divisional level;
- provision of potable water to entire population;
- provision of sewerage facilities to all urban areas and 75 percent to rural areas; and
- complete village electrification.

11. A Summary of major economic and social indicators for the period 1992 to 2008 is given in Statistical Appendix Table-I-2.1.

B. Policy Framework

12. The market mechanism would serve as a basis for major economic decisions. Private sector would be the main instrument of economic change, government policies providing signals and directions towards the envisaged path. Nevertheless "regulation" is not a term to be obliterated from future economic management. Indeed there is a need to make distinction between the judicious regulation and the one which hampers economic growth. Similarly, public sector activities which are conducive to growth and equitable distribution should be distinguished from those which crowd out private sector's initiatives. While decisions 'what to produce and how to produce' would at large be the responsibility of the private entrepreneurs, regulation in the form of legal framework and judicious fiscal, monetary and commercial policies would be needed to ensure consistency of the institutional framework. The government would have to undertake and support education and training so that human resource development takes place and efficient and productive manpower becomes available to the private sector. The Government will also fulfil the promise "Children First" made at the World Summit for Children held in September, 1990. Finally, government will have to make sure that enough credit is available to finance the growing investment.

13. Besides the envisaged shift in the general policy framework, target-specific policies can be broadly classified into 4 groups:

a) ***Policies Aimed at Macro-Economic Stability:*** Attaining macro-economic stability requires reduction in budget deficit, balance of payments deficit, and inflation rate. Resource generation on the one hand, and demand management on the other are the two effective tools for this purpose. Policy steps to invoke these tools in the coming years will include:

- Restructuring the taxation system in order to enhance the tax elasticity.
- Containing Government expenditure, particularly current expenditure.
- Effecting good governance at all levels, maximising the convergences between efficiency and equity.
- Increasing export growth, particularly of high value added products.
- Higher domestic production both in agriculture, minerals and manufacturing sector e.g. wheat, edible oils, crude oil, fertilizers, and high engineering parts & spares.

b) ***Policies for Development of Social and Physical Infrastructure:*** A beginning has already made in the area of social development by formulating a 5 year Social Action Programme. Larger investments are likely to be made in the coming years for sectors like water, energy, education and health. This has become possible firstly by transferring some of the large corporations outside the budget (like, OGDC, WAPDA, PTC), and by providing a package of incentives for the development of infrastructure through the private sector.

c) ***Growth Related Policies:*** Policies aimed at accelerating the rate of growth in per capita income will include:

- Increasing investment rate of private sector.
- A major advance in foreign investment.
- Human resource development, and skill formation.

- Adoption of new technology.
- Reduction in population growth.

d) *Policies for Income Distribution & Social Justice:* Distribution can be regulated in two ways: first, through devising the production process in such a way that it has a built-in feature of maximizing employment and uplifting backward regions, and second, via specific policies based on anti-poverty measures, or direct welfare raising steps.

High growth envisaged in the Plan will itself lead to better distribution of income. A positive correlation has been observed between high growth and improvement in distribution. This would be supported by other policy measures.

Growth would provide more job opportunities, particularly on account of the emphasis on cottage and small scale industries. This will also have a favourable impact on distribution.

Emphasis on rural uplift and rapid development of the under-developed regions would ensure equitable distribution of job opportunities.

Special anti-poverty and direct welfare promoting policies already in practice will be extended in coverage including:

- Liberal provision of civic amenities, particularly in the rural areas such as water-supply, sewerage, electrification, transport and communications.
- Credit facilities for self-employment.
- Improvements in Zakat, Ushr and Baitul-Mal - larger resources, better targetting.
- Food Stamps schemes for poor people.

I-3

PLAN SIZE AND INVESTMENT

At 1992-93 prices, the Plan size is proposed at Rs 1700.5 billion which implies an increase of 48 percent over the estimated actual outlays of the Seventh Plan. Compared to the Seventh Plan estimated actuals, the public sector development outlay is projected to be 36.1 percent higher, while the private fixed investment is projected to go up by 59.1 percent. Within total outlay, the share of private investment is forecast to reach 55.8 percent as against 51.9 percent and 48.3 percent in the Seventh and Sixth Plans respectively. The relative size of the three plans is compared in Table-3.1.

Table-3.1
Relative Size of the three Plans
(Rs billion)

Plan	At Current Prices			At 1992-93 Prices		
	Public Sector Outlay	Private Fixed Investment	Total	Public Sector Outlay	Private Fixed Investment	Total
6th Plan (Actual)	242.4	203.3	445.7	471.6	441.3	912.9
7th Plan (Expected)	463.2	485.6	948.8	552.8	596.2	1149.0
8th Plan (Target)	923.1	1168.5	2091.6	752.1	948.4	1700.5

2. The Eighth Plan consolidates the shift in investment from public to the private sector. The main vehicle for the implementation of public sector development programme is the Annual Development Plan (ADP), comprising budgetary component and the non-budgetary outlays by the Corporations. The Plan proposes a Public Sector Development (PSDP) outlay of Rs 752.1 billion. In addition to the capital formation component in PSDP, the public sector fixed investment also include non-plan fixed investment such as by local bodies, financial institutions and in the current expenditure. Thus public sector total fixed investment after necessary adjustments, is estimated at Rs 749.4 billion.

3. The Eighth Plan period coincides with Pakistan's commitment for structural adjustment, deregulation, liberalization, privatization and a more open environment for both foreign and domestic investment. The private sector, is

expected to play a leading role in investment, production, resource generation and trade. The Plan provides Rs 948.4 billion (at 1992-93 prices) for private sector investment, or some 55.9 percent of the total fixed investment of Rs 1697.8 billion. The proposed private investment is about 59 percent higher than the Seventh Plan (Rs 596.2 billion at 1992-93 prices). The private share could be larger but for the public sector to clear the enormous backlog in social sectors, and physical infrastructure.

4. Projection of private sector investment is indicative. Actual investment could be larger, depending on the initiatives of private entrepreneurship and macro-economic policies of the government and the size and structure of foreign direct investment.

5. Foreign direct investment (BOP) currently accounts for about 5 percent of private investment with nearly 53 percent going to mining and quarrying (oil and gas) followed by 10 percent as the share of manufacturings. The plan provides a prominent role for foreign direct investment in industry, development of oil and gas resources, generation of electricity, ports, shipping and expansion of telecommunication services. It is expected that private long-term capital (net) will account for 27.7 percent of total long-term capital (net) receipts envisaged in the Plan. In absolute amount the private long-term capital (net) is forecast to add up to \$ 3700 million (Rs 102.6 billion) over the five years or some 8.8 percent of the Eighth Plan's private investment forecast of Rs 1168.5 billion at current prices.

6. Public and private sectors together saved (gross) about 14.5 percent of GDP during 1980s; with private sector accounting for over 90.4 percent. The general government savings, however, were negative. National savings performance in Pakistan, in recent past, has been affected by fiscal deficit, deterioration in terms of trade and falling household savings, particularly in the wake of decline in remittances and inflationary pressure.

7. The Plan projects the average rate of national savings to increase from 15.8 percent in 1992-93 to 20.5 percent of GDP in 1997-98 and the foreign savings to come down to 2.1 percent from 4.2 percent of GDP in 1992-93. The Plan's overall savings target implies a marginal rate of national savings of 27.0 percent. It is high but attainable. Pakistan has recorded higher rates of marginal savings of 38.4 percent in 1986-87, 35 percent in 1985-86 and 30.6 percent in 1982-83.

8. Increased savings are crucial to the projected investment level. For this a wide ranging strategy will be adopted. Firstly, budgetary discipline should lead to a revenue surplus. Secondly, structural and policy reforms should enable the public corporations to generate internal surpluses to finance significant portion of their development outlay. Thirdly, the provincial and local governments should generate additional resources not only for meeting their current expenditure but

also the development expenditure on such items as the purchase of durable goods, major repairs and maintenance and construction works. Fourthly, the reforms and policy changes initiated by the Government would encourage the corporate sector to channelise a larger proportion of its savings to new investment. Fifthly, the policy of ensuring positive rate of return on national savings schemes, introduction of attractive investment instruments by public and private sectors and lower rate of inflation would encourage the household sector to enhance its savings and channelise them for investment in the formal sector.

9. The financial sector will be used as a catalyst of mobilising resources and their use in productive investment. The policy of deregulation and liberation is leading to the establishment of commercial and investment banks and other financing institutions which will play vital role in investment promotion and financial intermediation. Reforms of capital market, introduction of new financial instruments and development of secondary market would also catalyse more investment and enlarge the formal sector of the economy.

10. The macroeconomic framework proposed for the Eighth Plan is shown in Statistical Appendix Table-I-3.1. Sectoral allocation of Plan outlay is shown in Statistical Appendix Table-I-3.2.

I-4**FISCAL AND MONETARY DIMENSIONS****Fiscal**

Fiscal policy assumes a vital role in an economy relying on private sector as the main instrument of economic efficiency. This requires a three pronged strategic framework.:-

- (i) Macro-economic stability focussing on reduction in fiscal deficits to signal well disciplined economic management and to ensure that private sector is not crowded out of investment finance.
- (ii) Provision of a level playing field for various sectors and for various categories of investors in the same sector, to ensure equity and to reduce rent seeking activities.
- (iii) Encouraging the emergence of competitive and open market system.

2. The Plan aims at using the fiscal policy as an important mechanism of policy planning. In the past the fiscal situation had deteriorated on account of slippage in revenues and upward pressure on expenditure. This led to heavy dependence on borrowing, increased debt servicing and substantial monetary expansion. This trend will be arrested during the Eighth Plan. Determined efforts will be made for resource mobilization and expenditure containment.

3. It is proposed to bring down the overall fiscal deficit from 6.8 percent in 1992-93 to 4.3 percent of GDP in the terminal year of the Eighth Plan with budget financed development programme around 6.1 percent of GDP. Revenue augmenting measures would focus on reforming the tax structure of the country. Efforts would be made to reduce tax evasion and enlarge the base of direct taxes by eliminating exemptions and making suitable adjustments in the tax rate structure. Similarly, the scope of wealth and capital value tax would be extended to cover other sources of wealth and property. The initiatives taken during the Seventh Plan to broaden the base of sales tax would be continued during the Eighth Plan and a broad based consumption tax with the characteristics of value added tax will be imposed. The custom tariff structure will be rationalized so as to make it more responsive to the requirements of the emerging economic dispensation. Efforts will be made to increase the share of direct taxes and reduce dependence on custom tariff. The surcharges will be rationalized and brought under the normal taxation system.

4. On the expenditure side measures would involve containment of Government expenditure on general administration, debt servicing and subsidies.

The provincial and federal financial relations will be restructured, imposing user charges, increasing self-financing of autonomous bodies and the elimination of subsidies. The financial position of local bodies will be improved by raising local taxes and through other revenue generation methods.

5. The revenues are projected to grow at 12.2 percent per annum while current expenditure is projected to grow at 8.0 percent per annum. Total revenues during the Eighth Plan period are projected at 19.8 percent of GDP while current expenditure at 19.2 percent, thereby generating a revenue surplus of 0.6 percent to be used for financing the public sector development programme.

6. The overall budgetary position during Eighth Plan is summarised in Table-4.1. Details are given in Statistical Appendix Table-I-4.1.

Table-4.1
Budgetary Position of Eighth Plan
(At 1992-93 Billion Rs)

	1992-93 (Bench mark)*		Terminal year 1997-98		Five Years Total 1993-98	
	Rs	% of GDP	Rs	% of GDP	Rs	% of GDP
I. Total Revenue	241.4	17.4	429.63	21.7	1703.4	19.8
-Tax Revenue	180.8	13.0	327.82	16.6	1293.1	15.0
-Non Tax Revenue	60.6	4.3	101.81	5.2	410.3	4.8
II. Total Expendi- ture.	336.4	24.2	512.2	25.9	2137.5	24.8
- Current	266.5	19.2	391.1	19.8	1654.2	19.2
- Development	69.9	5.0	121.1	6.1	483.3	5.6
III. Over all deficit	95.0	6.8	85.4	4.3	434.1	5.0

* Normalised Benchmark has been used. This may not tally with actuals.

7. The budget financed public sector development programme is envisaged at Rs 483.3 billion (5.6 percent of GDP) at constant prices of 1992-93. The mode of financing the budgetary development programme, assumes an availability of Rs 130.7 billion as external resource inflow on net basis at constant prices of 1992-93. The position is summarised in Table-4.2.

Table-4.2

Financing of Eighth Plan
Public Sector Development Programme
(1992-93 Prices)

	Billion Rs	% Share
Total Outlay	483.3	100.0
A. Domestic Resources	352.6	73.0
- Revenue Surplus	(49.2)	(10.2)
- Net Capital Receipts	(164.4)	(34.0)
- Bank Borrowing	(139.0)	(28.8)
(B) External Resources	130.7	27.0

8. The main areas which will be stressed during the Eighth Plan are:-

- a) converting the revenue account from a position of deficit to that of a surplus which will be used to meet a part of the development expenditure;
- b) broad basing the tax system with a shift from indirect to direct taxes and from import based to consumption based taxes;
- c) retirement of high cost debt by utilisation of privatization proceeds;
- d) legislative control on budget deficit;
- e) mobilisation of resources at all the three tiers, namely federation, provincial and local bodies;
- f) self financing by autonomous bodies; and
- g) elimination of subsidies.

Monetary

9. The comprehensive reforms programme of financial sector initiated during the Seventh Plan will be carried forward during the Eight Plan. The main thrust of the policy will be on deregulating the system and using monetary policy as an important vehicle of growth and stability. The main features of the reforms are:

- i) moving to a market-based system of rates of return by establishing an auction market for the government debt instruments of short-term treasury bills and medium to long term Federal Investment Bonds(FIBs);
- ii) development of secondary markets for Government debt instruments;
- iii) privatization of the nationalized commercial banks (NCB's);
- iv) encouraging the establishment of commercial investment and housing banks/financing institution in the private sector; and
- v) institutional improvements in the State Bank.

10. The objectives of this programme are to strengthen the role of the formal financial sector, improve domestic savings, enhance allocative efficiency of bank credit and also to eliminate unofficial markets. The Eighth Plan would aim at maintaining stability in the financial sector while ensuring adequate availability of bank credit to the private sector for productive activities in general and the priority sectors in particular and discouraging its flow to non-essential, unproductive and speculative activities. Banking reforms will promote capital formation, regulate money supply and ensure equal access to credit for private sector.

11. The Eighth Plan would aim at containing monetary and credit expansion within reasonable limits and at the same time making adequate credit available to the economy for productive purposes. Taking into account the envisaged growth of 7.0 percent per annum in GDP in real terms, investment requirements and need for price stability, a monetary growth rate of about 12 percent has been projected for the Eighth Plan. Efforts will be made to expand the non-bank financial sector so that the investment needs of the economy can be fully accommodated.

I-5

PUBLIC SECTOR DEVELOPMENT PROGRAMME

The proportion of the Public Sector expenditure in the Eighth Plan's total outlay is substantially lower than the Seventh Plan. However, while the Government withdraws from industry and begins to privatise some infrastructural facilities, it will continue to play a dominant role in the development of agricultural research, water, fuel and power, railways, roads and social sectors. The main elements of the strategy for the Public Sector Development Programme are:-

- a) roll back of public sector from commodity producing sectors;
- b) emphasise on human resource development; and
- c) provision adequate physical infrastructure.

2. The total public sector outlay is estimated at Rs 752.1 billion, of which Rs 483.3 billion is proposed to be financed from budget allocation and Rs 268.8 billion by corporations outside the budget. The position is summarized in Table-5.1. The sectoral allocations of the Public Sector Development Programme are shown in Statistical Appendix Table-I-5.1.

Table-5.1

**Allocation of Public Sector Development Programme
(1992-93 prices)**

(Rs Billion)

	Budget	Others	Total
I. Federal Ministries	330.61	-	330.61
II. Provincial	162.78	-	162.78
III. Corporations	-	268.81	268.81
Total:	493.39	268.81	762.20
Less operational shortfl	10.07	-	10.07
Total Eighth Plan	483.32	268.81	752.13

3. The funds for the provincial development programmes were largely provided by the Federal Government until 1990-91. However, with the National Finance Commission's Award in March, 1991, the share of the Provinces in the divisible pool has increased substantially. Most of them became surplus in current resources which were subsequently diverted to meet the development needs during 1991-92 and 1992-93.

4. The provincial governments have been provided Rs 162.8 billion including Rs 81.8 billion for SAP by the Federal Government for the development programme. Provinces own contribution towards the development programme will be in addition to the federal allocation.

5. Allocations for the special areas are given in Table-5.2.

Table-5.2

Allocations for Special Areas				(Rs Billion)	
S.No.	Sector	Normal	SAP	Environment	Total
1.	Azad Kashmir	6.783	2.060	0.885	9.728
2.	Northern Areas	3.176	1.030	0.935	5.141
3.	FATA	5.936	2.476	0.314	8.726
4.	FATA-DC	1.270	0.000	0.000	1.270
Total:-		17.165	5.566	2.134	24.865

6. The Eighth Plan places emphasis on the role of public sector corporations in the capital formation. In order to achieve the objective of self reliance, these corporations are being encouraged to expand investment out of their own resources. The corporations will finance the entire programme of Rs 268.8 billion from self arranged resources comprising self-financing and local and foreign borrowings.

7. With the delinking of WAPDA (Power) and OGDC from the budget, increasing proportion of the development programmes of these corporations will be financed from their own sources. At the same time efforts are underway to privatize PTC. Its programme has been kept outside the budgeted public sector development programme. However, the programme of NHA is totally budgeted. All other corporations are totally delinked from the budget and would raise their own resources to finance their programme. The programmes of the corporations are indicative as the actual size would depend on the resources that these corporations are also to mobilize. The details of corporation's programme is given in Statistical Appendix Table-I-5.2.

8. The key projects of the Public Sector Development Programme are set out in Statistical Appendix Table-I-5.3.

I-6

PLAN MANAGEMENT

In the past the implementation of the Public Sector Development Programme has suffered due to :-

- i) mismatch between the annual phasing of the Plan and the allocations made in the budget for the PSDP;
- ii) frequent cuts in budget allocations for development;
- iii) large size of portfolio and throwforward of ongoing schemes, crowding out the new schemes;
- iv) inadequate allocation for schemes resulting in execution delays in and cost escalation;
- v) poor project preparation;
- vi) price escalation and currency depreciation;
- vii) delay in approval of the schemes;
- viii) changes in scope of the schemes; and
- ix) lack of expertise for the preparation, monitoring and execution of the schemes.

2. Attempt will be made during the Eighth Plan to remove these bottlenecks to the extent possible, and improve upon the implementation of the schemes included in PSDP. Recommendations in this regard are given below:-

- i) ***Allocation for PSDP in the Budget:-*** The allocation of funds for PSDP in the annual budget will be in accordance with the annual phasing proposed in the Plan.
- ii) ***Throw-forward into Eighth Plan:*** The throw-forward of PSDP from 7th to 8th Plan is too large to leave any room for major initiatives. The Federal and Provincial Governments would scrutinise and prune the port-folio of ongoing schemes with a view to ensuring that the size of

the throw-forward is brought to a sustainable level providing more space for new schemes.

- iii) **Portfolio of Development Schemes:** The portfolio of ongoing schemes under PSDP will be kept at a level which does not preclude major initiatives.
- iv) **Rehabilitation and Consolidation of Physical Infrastructure etc:** As mentioned earlier a neglected area of economic management is the imbalance between development and maintenance; between accumulation of assets and their optimal utilization over their life time. Mechanism will therefore be initiated for earmarking funds in the Eighth Plan for maintenance, rehabilitation and consolidation of infrastructure and other facilities.
- v) **Decentralization of Power:** The decentralization of powers will be encouraged for improving the implementation of schemes .
- vi) **Funding of Schemes:** For efficient execution, the schemes will be properly funded. The policy of inadequate or "token" funding will be discouraged. In allocation of funds priority will be accorded to ongoing projects. Their allocation in no case should be less than 50 percent of the requirements under annual phasing as per approved PC-I.

3. The following specific proposals would be considered for improving the preparation, monitoring and execution of the projects:-

(a) **Identification of Projects/Programmes**

- New projects/programmes would be identified well in time, keeping in view Plan's objectives/targets and resources earmarked for each sector/sub-sector.
- New projects/programmes so conceived would be given priority ranking and phased out over the plan period, keeping in view the financial requirements of on-going projects of previous plan.

(b) **Project formulation**

- Projects costing Rs 50 million and above would be based on proper feasibility study/survey reports.

- All concerned agencies would be consulted/involved in the PC-I preparation from the very beginning.
- Attempt would be made to make PC-I cost estimates more realistic and comparable with other similar projects recently completed or approved. It would also be ensured that no essential component/item of work is left out.
- Inter-relationship would be established between financial phasing and actual implementation which must be further supported with Bar Charts, Critical Path Method etc.

(c) *Project appraisal & scrutiny*

- All necessary data for technical scrutiny and input - output prices for economic and financial appraisal would be prepared with due care and responsibility, as it affects overall feasibility of a project. The financial phasing should be realistic, as it also affects the viability of a project.
- Financial and physical phasing (implementation plan) would be properly scrutinised by the Planning & Development Division (concerned Technical Section and Projects Wing) and the Finance Division for budgetary commitment in line with PC-I financial phasing.
- Staff sanctions by the Finance Division would be expedited.

(d) *Project implementation*

- Appointment of Project Directors soon after the approval of a project. Staff appointment be phased out, in line with requirements of implementation.
- Project Directors to be given adequate financial and administrative powers. He will not be transferred during the currency of project. Project Director should be able to resolve implementation issues on his own.

- Soon after the issuance of administrative approval, consultants for preparation of design/drawings and tender documents, be appointed/hired keeping in view the PC-I completion schedule. This would facilitate timely award of tenders.

(e) *Progress monitoring & evaluation*

- A three tier progress monitoring and evaluation system (Project Director, Sponsoring, and Planning Agencies level) has been instituted for a proper feed-back to all concerned. Regular supply of progress reports on PC-III proforma by all the concerned agencies would also be ensured.
- Quarterly returns are being obtained regularly by the Projects Wing of Planning and Development Division and MIS/computerized data base is being updated.
- Summaries on Monitoring & Evaluation Reports would be submitted to ECNEC/CDWP regularly to provide feed-back at policy level.
- Project Planning, Monitoring and Evaluation (PME) Units/Cells/Wings would be strengthened wherever set-up and created where work load so justifies. These cells would have close liaison with respective Project Directors and among themselves, for better monitoring and evaluation.
- PME Cells/Wings would be adequately staffed with professionals as has already been directed by the ECNEC. Besides, project monitoring/evaluation will be computerized, and quarterly progress review meetings would be organized.
- Project completion report on PC-IV proforma would be got compiled and furnished to the Project Sponsoring Ministry/Division/Agency as well as to the Finance and Planning Divisions, soon after the finalization of accounts of each project.

(f) *Project evaluation*

- While completion of evaluation of major projects is the function of the Planning & Development Division, the Project Sponsoring Ministries/ Divisions would also periodically evaluate their projects/programmes. Mid-term evaluation is desirable for on-going projects/programmes which start yielding benefits with partial completion.

(g) *Training facilities*

- The Pakistan Planning & Management Institute will be made operational. The Institute will offer preliminary and specialized courses to train/impart necessary knowledge/skills to relevant officers in areas like project formulation, appraisal, management, monitoring and evaluation and macroeconomic planning. All project managers and planners will be required to complete a project management course from the Institute. The Institute will strengthen the in-house capacity of ministries and line departments and build up a core of planners and project managers for every major sector of economy.

(h) *Local development institutions*

- Capacity for preparation of schemes scrutiny and monitoring would be provided to local bodies. Citizen's participatory mechanisms would also be developed at local level, parallel to the administrative structure for monitoring and evaluation. The inter-linkage will bring the local bodies into mainstream of national development. Furthermore, Local Councils should be given adequate resource - raising powers.

(i) *Non-Government Organizations (NGOs)*

Involvement of NGOs, especially in the rural and social sectors, will provide a flexible and cost-effective mechanism for providing support services to production and other income-generating activities. They will fill up the gap left by line department. Greater public participation will be

ensured by providing institutional and technical support to voluntary agencies. Activities of development agencies and of cooperatives will be integrated with the NGOs to bring about a common and agreed plan at local level.

(j) *Mid plan evaluation*

- The Planning Commission will maintain a close watch over the unfolding economic situation and will make suggestions on the use of the instruments of economic policy for ensuring the achievements of the Plan objectives. The Planning Commission will submit periodic reports to the newly constituted Economic Policy Committee to ensure timely policy responses.

EXTERNAL BALANCE

Policy and Strategy

The Eighth Plan scenario in the external sector is characterised by the following features:

- i) *Self-reliance as a long term objective:* The balance of payments deficit basically reflects investment-saving gap of the economy, and gauges the extent of external dependence. The empirical evidence gathered from the experience of developing countries reveals that efforts to attain self-reliance in fact enhance the dependence in the initial stages, but reduces it in the long run. The external deficit during the Eighth Plan period would be restrained keeping this limitation in view.
- ii) *Export oriented growth:* Rapid growth of exports and greater diversification. The changing economic environment such as (i) shift of Eastern Europe and Russia in favour of market economy, (ii) establishment of North American Free Trade Area, (iii) greater integration of European Community, (iv) increasing dominance of Japan as an economic and financial power, and (v) newly emerging industrialized nations of the Pacific rim, including, in addition to the earlier four giants of Korea, Hong Kong, Taiwan, and Singapore, the economies of Thailand, Malaysia and Indonesia, would pose a new challenge. New markets will be sought so as to secure a more diversified structure for exports. The recently concluded GATT Multilateral Trade Agreement offers opportunity for expanding export of goods and services. Attempts would be made to explore these opportunities fully.
- iii) *Liberalisation of imports in-pursuance of (i) privatization policy, (ii) sustaining growth (iii) ensuring capacity utilization and (iv) maintain a competitive level in cost of production:* The thrust of import liberalization would be towards improving the technology and efficiency of the intermediate and capital goods industries.
- iv) Stability in remittances. Measures for orderly absorption of Pakistani workers in the Gulf and South Asian labour market.
- v) Faster utilization of the project aid already in the pipeline.
- vi) A decisive shift from foreign aid to foreign direct investment.

- vii) Continuation of the existing policy of flexible exchange rate. To avoid to the possible extent any overvaluation of exchange rate and thereby ensuring a kind of built-in stabilizer in the external sector, the existing system of managed float will continue. This will serve as a shock absorber through price adjustments obviating the need for trade restrictions.
- viii) *Tariff rationalization*: Protecting the domestic industry through tariff has lead to the creation of an industrial structure highly inefficient and always seeking fiscal and financial support for sustenance. The economy in the future must have a strong export orientation with quality improvement and cost competitiveness as the two vital elements. Reduction in tariff and its rationalization would be an integral part of the commercial policy during the Eighth Plan period. The maximum tariff, would be brought down from 91 percent to 35 percent.

Projections

2. Based on these elements, and with specified assumptions regarding other relevant variables like GDP growth rate (7 percent per annum), and world trade growth (5-6 percent per annum in real terms), inflation (6.5 percent per annum) and exchange rate depreciation (3.5 percent per annum), the most feasible set of projections for the 8th Plan suggest the following:
 - i) Export growth in nominal dollar terms will be in the vicinity of 12 percent per annum. Major thrust of exports will be on value added textile products, light & medium engineering goods, and sports and surgical goods.
 - ii) Growth in imports will be around 8 percent per annum with imports of capital goods and raw material for capital goods growing at a relatively higher rate consistent with the growth rate for fixed capital formation as envisaged in the macro-economic framework.
 - iii) Workers' remittances are likely to grow from the existing level of \$ 1.5 billion at an average rate of 2.0 percent per annum.
 - iv) The combined outcome of (i-iii) above would imply containing the deficit on current account of the balance of payments at a level of \$ 1.84 billion at the terminal year of the Plan, down by 21.4 percent from the benchmark level of \$ 2.34 billion in 1992-93. Since 1987-88, the current account deficit of the balance of payments has been over 4 percent of GDP. It is planned to bring this down consistently to 2.4 percent by the end of the Plan.

- v) As a consequence of reduced deficit in balance of payments, long term external debt recorded at 36.8 percent of GNP in 1992-93 would not be allowed to increase during the Plan period.

Exports

3. The targets by major exportable items are given in Table-7.1.

Table-7.1
Export Projections
(At 1992-93 Prices)

	1992-93	1997-98	ACGR
	Benchmark*	Projections	(%)
(\$ Million)			
Rice	387	440	2.6
Basmati	223	272	4.1
Others	164	168	0.5
Raw Cotton	448	293	-8.1
Yarn	1189	1829	9.0
Cotton Cloth	1059	1705	10.0
Readymade Garments	680	1368	15.0
Tarpaulin & Canvas	56	60	1.4
Hosiery	485	855	12.0
Textile Made-ups	630	1161	13.0
Fish & fish Prep.	119	152	5.0
Leather	251	284	2.5
Carpets	180	209	3.0
Synthetic Textile Fabrics	480	1194	20.0
Others	1662	3213	14.1
Total (cif)	7626	12763	10.8
Total (fob)	7550	12640	10.8

* Benchmark may not tally with actuals.

4. Expected trends of the exports by economic categories over the Plan period are shown in Table-7.2.

Table-7.2
Exports by Economic Categories
(At 1992-93 Prices)

	1992-93 Benchmark	1997-98 Projections	ACGR (%)
A: Million \$			
Primary Commodities (Rice + Cotton)	835	733	-2.6
Cotton Based Manufactures	4099	6978	11.2
Other Traditional	1030	1839	12.3
(Leather, carpets, fish, syn. cloth)			
All others	1662	3213	14.1
Total exports (cif)	7626	12763	10.8
B: % Share			
Primary Commodities (Rice + Cotton)	10.95	5.74	
Cotton Based Manufactures	53.75	54.68	
Other Traditional			
(Leather, carpets, fish, syn. cloth)	13.51	14.41	
All others	21.79	25.17	
Total exports (cif)	100.00	100.00	

5. In order to attain the specified export targets, following measures will be adopted:

- Encouragement of appropriate institutional arrangements in the private sector for cold storage, dehydration, canning and food processing facilities.
- Extending export credits to selected countries to boost exports of engineering goods.
- Attracting foreign private investment in export industries.
- Rationalizing the existing export finance scheme.
- Setting up more export processing zones.

Imports

6. The item wise import growth rates in volume terms are given in Table-7.3.

Table-7.3

**Import Projections
(At 1992-93 Prices)**

	(\$ Million)		
	1992-93 Benchmark*	1997-98 projections	ACGR (%)
Crude Oil	538	500	-1.5
POL Products	1040	1800	11.6
Fertilizers	269	358	5.9
Edible Oils	488	601	4.3
Wheat	363	58	-30.7
Tea	184	229	4.5
Capital Goods	3550	4979	7.0
All Others	4048	4787	3.4
Total (cif)	10480	13312	4.9
Total (fob)	9613	12211	4.9

* Benchmark may not tally with actuals.

7. The composition of imports is shown in Table-7.4.

Table-7.4
Composition of Imports
(At 1992-93 Prices)

	1992-93 Benchmark	1997-98 Projections	ACGR (%)
A: Million \$			
Capital Goods	3550	4979	7.0
Industrial Raw Material	4358	5971	6.5
Consumer Goods	1314	868	-8.0
All others	1258	1494	3.5
Total (cif)	10480	13312	4.9
B: % Share			
Capital Goods	33.9	37.4	
Industrial Raw Materials	41.6	44.9	
Consumer Goods	12.5	6.5	
All others	12.0	11.2	
Total (cif)	100.0	100.0	

Other Receipts and Payments

8. For the 8th Plan period, with the resumption of economic activities in the Gulf countries and consequently the returning of some of the Pakistani labour back to their jobs, the flows of remittances have been envisaged to rise from a level of \$ 1.55 billion in 1992-93 to \$ 1.71 billion in 1997-98, averaging \$ 1.65 billion per year. The said level of remittances is after making adjustment for the shift in the modus operandi under which the Pakistani emigrants can send their transfers, i.e., partly in the form of foreign currency accounts and foreign currency notes which are freely importable and saleable.

9. After allowing for other factor income and non-factor income flows, the invisible deficit is projected to accelerate from \$ 275 million in 1992-93 to \$ 1650 million in the final year of the Plan. Table-7.5 gives the details of the invisibles.

Table-7.5
Invisibles

(\$ Million)

	1992-93 Benchmark*	1997-98 Projections	ACGR (%)
Invisibles (net)	-275	-1650	43.1
Non-factor income (net)	-1085	-1537	7.2
Receipts	1592	2869	12.5
Payments	2677	4406	10.5
Factor Income (net)	810	-113	-167.4
Receipts	2285	2504	1.8
of which			
Remittances	1550	1711	2.0
Unrequited Transfers	247	301	4.0
Payments	1475	2617	12.2
of which			
Interest	756	1319	11.8

*Benchmark may not tally with actuals.

10. With the exports growing faster than the imports in nominal dollar terms, the Plan envisages the trade deficit to decline from a benchmark level \$ 2063 million in 1992-93 to \$ 192 million in 1997-98, a reduction of 37.8 percent per year. The deficit on account of invisibles, on the other hand, is likely to accelerate by 43.1 percent per year. Consequently, the current account deficit recorded at \$ 2338 million in 1992-93 (4.5 percent of GDP), will, after witnessing a slight increase in the second year, decline gradually to a level of \$ 1842 million (2.4 percent of GDP) in the terminal year. Over the five year period, the cumulative current account deficit would aggregate \$ 10.61 billion implying, on average, its ratio to GDP at 3.4 percent per annum.

11. The capital requirement comprises of (i) current account deficit, (ii) amortization, and (iii) desired level of cash foreign exchange reserves. The amortization, including the repurchases from the IMF, for the Plan period is estimated cumulatively at \$ 5.23 billion. Cash foreign exchange reserves are assumed to maintain a level between 4 to 6 weeks' imports. This would add an additional amount of \$ 1.29 billion, bringing the Plan's total capital requirements to \$ 17.1 billion which would be met from foreign assistance and other sources. The details of the capital requirements and its financing are summarized in Table-7.6.

Table-7.6
Capital Requirements and Financing

(\$ Million)

	1992-93 Benchmark	1997-98 Projections	Total Five Years
Capital Requirements	3282	3317	17128
Current Account Deficit	2338	1842	10605
Amortization*	1214	1231	5232
Increase in			1291
Foreign Exchange Reserves	-270	244	
Financing	3282	3317	17128
Official Long Term Capital (gross)	2407	3435	14194
Project	1737	3325	12925
Non-Project	670	110	1269
Private Long Term Capital (net)	500	800	3700
Other Medium & Short-Term Capital(net)	375	-918	-766

* Includes repayment to IMF

12. The requirements for external capital inflows during the Plan period would average \$ 3426 million a year. On the financing side, the project aid is anticipated to increase from \$ 1737 million in 1992-93 to \$ 3325 million by the end year of the Plan. Food aid estimated at \$ 255 million in 1993-94 is envisaged to remain constant at a minimum level of \$ 80 million during the last four years of the Plan, assuming a rapid decline in wheat imports. The disbursements of commodity aid, on average, is forecast to be at \$ 96 million.

13. A significant departure from the conventional structure of balance of payments deficit and its financing is likely to take place during the 8th Plan on account of larger contribution being envisaged from the private long term capital inflows. The current policy of attracting foreign investment accompanied with larger imports of machinery and capital goods will, on the one hand, add to merchandise imports enhancing thereby the trade as well as current account deficit. On the other hand, the larger capital inflows will provide an additional source of financing the current account deficit. The Plan projections assume that the net flows of private long term capital will increase from an annual average of \$ 635 million during the 7th Plan to \$ 740 million during the 8th Plan.

14. The overall balance of payments position is shown in Statistical Appendix Table-I-7.1.

PART-II
MAIN AGENDA

(49—50)

II-1

APPROACH TO EIGHTH PLAN

a- STRATEGIC ISSUES

The Eighth Five Year Plan (1993-98) is being launched at a crucial period. While the overall objectives of planning are still pivoted around the enhancement of social and economic welfare of the people, they are being pursued at a time of fundamental change in domestic and global economies; most notably the redefinition of the government's role in the economy. This warrants a reorientation of the planning process. The conventional approaches to planning reflected in a large public sector investment programme, detailed sectoral planning, elaborate controls on imports and domestic credit, highly differentiated tax and tariff regimes, and exclusive reliance on the government for the provision of social and physical infrastructure, need to be changed. The often neglected areas of equity and economic environmental stability must also be brought under sharper focus .

2. The recent readjustments in economic management include privatization, decontrol, deregulation, liberalization, market orientation, community involvement and conservation physical environment. At the policy level, there is a parallel shift towards the use of incentives, inducements and deterrents, in preference to direct controls. Public investment is increasingly focussing on physical and social infrastructure. And even in these areas the private investment is encouraged. Legal instruments, institutions and monitoring mechanisms are being developed to ensure the effective functioning of the new policies.

3. These initiatives will alter the nature of planning. In contrast to earlier approaches, which saw the government as the main vehicle for economic change, the new approaches view the government as a catalyst, a manager, and a motivator. The objective of policy is no longer what the government could accomplish on its own, but how it could induce other economic agents to act in concert for the pursuit of the collective interest. These agents include business managers, workers, investors (both local and foreign), NGOs, and common households. Inducing them requires the use of economic incentives, institutions for engendering cooperation, training and skill development, monitoring, information dissemination, provision of infrastructure, proper maintenance of assets, stability of systems and policies, and the removal of obstacles. The exercise of economic planning should help the government step into its new role. This transformation marks a shift from allocative planning to indicative planning, from direct intervention to market signals. Fiscal, monetary, trade and sectoral policies become more relevant.

4. Beyond the policy issues, the Government must build up an enabling environment for investment and enhance absorption capacity of the system through effective, institutional arrangements. Enabling environment also calls for external economies; ready access to infrastructural services (energy, transport, communications, civic amenities) and availability of appropriately educated trained and disciplined manpower.

5. Apart from addressing these basic concerns, the Eighth Plan must redress certain imbalances which have tended to distort the developmental process. The Plan would endeavour to achieve five basic balances:

- (i) *Balance between planning for the public and the private sectors:* i.e. a balance between planning and policy.
- (ii) *Inter and Intra-Sectoral balance:* Balance between growth in GDP and progress of the social sectors and physical infrastructure.

The areas of social and physical infrastructure are still relevant for conventional planning. But even here planning could address the issue of mobilizing resources through sectoral policies, e.g. matching grant schemes, cost sharing arrangements, and reliance on BOT (Build Operate and Transfer) mechanisms etc.

Intra-sectoral balance requires enrichment and diversification within each sector. For instance, in agriculture it implies emphasis on land and water management, local adaptation of new varieties, greater emphasis on forestry, livestock and minor crops. In the industrial sector, attention needs to be given to small-scale industries, engineering sector, export marketing, and value-added product lines. In the social sectors, the quality of management emerges, as the main problem.

- (iii) *Balance between new investment and use of existing capital stock:* There is a need to improve the utilization of capacity, the quality of output and more generally the productivity of capital and labour.

A neglected area of economic management is the imbalance between development and maintenance expenditures; between accumulation of assets and their optimal utilization over time. Inadequacy of recurring budgets has led to a situation where old structures are

crumbling while new ones are created. The issue of adequate recurrent financing is not easy to resolve. User charges clearly linked to better maintenance could offer an opening but its scope is limited.

As recurring budgets cannot be increased in the short run, the plan must contain a major programme of rehabilitation of infrastructure; roads, buildings, canals, power transmission and distribution, telecommunications systems, etc. This would give more output from investment. It would also provide time to build up maintenance budgets.

- (iv) *Balance between project preparation and implementation:* Serious and growing weaknesses in implementation capacity affect the efficacy of public expenditures. An improvement would lower incremental capital output ratios and raise the growth rate from a given level of investment. If the neglect of implementation issues continues, wastages would multiply, gestation time would be longer and the aid pipeline would remain clogged.
- (v) *Balance between committed and available resources:* At the stage of formulation of a Five Year Plan it is generally discovered that the major part of resources has to be allocated to the ongoing projects. This militates against realization of new priorities. The main reason is that the number of projects is too large, and there is no control over the size of project portfolio of any Ministry/Sector. The aim is to ensure that a substantial share of the Plan resources are available for new initiatives. A close scrutiny of the ongoing projects will be undertaken with a view to cutting down and eliminating low priority projects so as to accommodate emerging priorities.

Project entry into the funding stream would be more selective, to avoid thin spread of resources and to accelerate the pace of completion.

6. In overall terms planning will focus on strengthening individual initiative, private enterprise and market mechanism. Employment will be promoted by expanding productive avenues. Poverty alleviation and income distribution concerns will be addressed through equitable and well-dispersed access to social and community services and dispersal of income generating activities. Public sector will also support and protect the poor and other vulnerable groups. Fiscal

discipline and monetary stability will be ensured to encourage higher levels of saving and investment. Self reliance will be promoted through expanding exports and foreign exchange earnings, attaining self sufficiency in the production of food grains, and exploitation of indigenous source of energy and fuels. Efforts would be made to bridge the gap between actual and potential capacity in selected sectors.

7. The Eighth Plan would not therefore be simply a summation of public sector expenditures or a list of schemes drawn up by ministries, departments and agencies and put together within a financial framework. It must break new grounds. It must be more relevant to the pressing problems of today, and the awesome challenges of tomorrow. It must be more balanced in content and style. It should reflect an architecture and not merely a mosaic of micro level proposals. It should not be restricted to the creation of physical assets but should encompass sustained improvement in the productive capacity of the people. It should synthesise dynamism with stability, creativity with discipline and encouragement of enterprise with equality of opportunity. It should culminate, not merely in a linear economic advancement, but a total transformation, so that Pakistan's polity can fulfil its appointed destiny in the more challenging world of the twenty first century.

II-1

APPROACH TO EIGHTH PLAN

b-GOOD GOVERNANCE

Planning graduated out of growth-manship in the seventies and began to address the concerns of equity. Since then it has added newer dimensions and turned development into a many-splendoured enterprise. This has happened in recognition of the fact that in the long term the most critical task is stability of the developmental environment. This implies:

- (i) 'Security of life, liberty, property - a satisfactory state of law and order.
- (ii) Stability of policy direction, avoidance of volatility and frequency of changes. However, adjustments and midcourse corrections in line with the longer term objectives should be welcome.
- (iii) Sustainability of the developmental process. Avoiding over-use of natural resources and degradation of the physical environment.
- (iv) Macro economic stability. Avoidance of large and persistent fiscal deficits and external imbalances and keeping inflation at a low level. Vigilance over the build up of foreign and domestic debt.

2. Macro economic stability figures prominently in the Plan agenda. It is proposed to reduce the fiscal deficit from 7.9% of GDP to 4%. The current account deficit will be reduced from 7% of GDP to 2.4%, and inflation rate from 9.33% to 6%. Long term external debt would be maintained at the level of 36% of G.D.P. High cost domestic debt would be retired by utilising the proceeds of privatisation. In order to ensure fiscal discipline legislative control over budgetary deficits would be introduced.

3. Parallel to macro-economic discipline, financial and economic discipline at the micro-level would be tightened. Measures would be taken to mitigate the heritage of collusion and default in management of the country's financial resources. Decisive action would be taken against the defaulters of tax, bank loans and utility bills.

4. The third element of discipline would come from an increasingly competitive market structure. The pressures for rent seeking and special concessions would be resisted. Market distortions would be corrected. Tax rates would be lowered; Exemptions would be withdrawn to widen the tax base. Better tax compliance would be ensured. Tariffs would be lowered to promote resilience and competitive strength of the production system. Monopolies would be regulated, particularly in product pricing.

5. Private sector would be main instrument of economic efficiency. For this purpose the supply base of the economy would be greatly augmented. Unit costs would be lowered through

ready access to infrastructure, services and trained manpower. The management of economic system would be a participative activity, with a deliberate focus on the empowerment of rural communities, NGO's and lower echelons of the Government Participation in decision making should encompass all the three modes of decision making: administration, local government and participative structures at the rural level. Administrative reforms will include decentralization in civil services. The scope of local government will be extended and adequate financial resources assigned to them consistent with their sphere of action. Rural communities should be empowered through rural support programme to take effective action for their own economic and social betterment.

6. Local Government reform will be a key element of the new system. The district set up would be strengthened and given more autonomy. It could thus bring the government to the door-step of the people.

Private Public Partnership

7. Private sector and the market mechanism are the two main pillars of the new economic structure. While the public sector moves from control to a supportive and balancing relationship with the private sector, the best results could be obtained by moving towards a framework of public-private partnership.

8. The partnership could be at the sectoral level or at the enterprise level. This partnership could be envisaged in any major economic activity including transport, communications, energy, education, health, water resource management and industries.

9. Participation may involve sharing of costs in the creation of assets, segmentation of activities as a basis for participation, BOT (Built, Operate & Transfer) arrangements for utilities or commercial enterprises, transfer for leasing of management, pioneering role by public sector and privatisation of public sector enterprises.

10. At the enterprise level partnership can be in terms of equity, particularly for the small investors and backward regions that cannot carry the entire commercial risk. It would thus become an instrument for long-term equalization of opportunities. At the same time objective criteria would be needed to ensure that the risks are shared and not transferred.

Quality of Administration

11. Legal and judicial processes must combine the ability to protect individual rights with the capacity to ensure accountability. The system should ensure timely and fair resolution of disputes. The executive organs should be efficient, responsible and largely free from extraneous influences. Institutions should be stronger than the individuals. Immunity from due process should not be a by-product of power.

12. In sum, the system must inspire confidence. Without this, the gains of development shall be shallow and short-lived.

13. The quality of the socio-economic administration should be judged in no mean measure by its ability to ensure equality of opportunity - in personnel management, in the entry and exit system for business enterprises; in access to education and employment, and in the dispensation of resources. This requires transparency, merit, objectivity and vertical mobility within the administrative, social and economic hierarchies.

Narcotics Control

14. The production, export, and fast expanding domestic use of narcotics has become the most critical problem of our society. The ability to deal effectively with this problem is the acid test of the efficacy of our management. Regretably, our record is replete with failure. We must wake up and confront the challenge - in particular the challenge of drug addiction; which is sapping up the creative energies of the nation.

Summing Up

15. These are some areas where the growth process must find meaningful linkages with the fountain springs of institutional strength. The criteria of good governance which find a partial reflection here are not easily measured. But surely, statistical convenience is no substitute for the long-term resilience of the system. And we must face up to this task while the judgement of history awaits us.

II-1

APPROACH TO EIGHTH PLAN

C- OBJECTIVES AND TARGETS

The overall objective of the Plan is to enhance substantially the socio-economic well being of the people as envisioned for an Islamic Welfare State. The primary instrument is an increase in the per capita income (with the long term objective of doubling it in a period of 15 years) through an annual average GDP growth of 7 per cent coupled with efforts to restrain population growth. The broad framework would be geared to:

- attaining 7 per cent per annum growth in GDP (including 4.9 per cent in agriculture and 9.9 per cent in manufacturing sector) by mobilizing domestic and foreign resources and efficient use of existing resources;
- encouraging participation of all people in the development process and a more equitable sharing of the benefits;
- generating additional employment opportunities by expanding productive avenues through private initiative as well as Government policies and programmes;
- alleviating poverty through an integrated approach of income generation, well dispersed access to social and community services, human resource development, extension of physical infrastructure, population welfare and special programmes for targeted groups and areas;
- ensuring greater self reliance, particularly in food, energy, public finance and external balance;
- conserving natural resources and ensuring protection of environment;
- promoting good governance ; and
- ensuring macro economic stability and discipline.

2. The key economic and social targets and projections are:-

ECONOMIC

- increase the gross domestic product by 40 per cent and per capita income by 22 per cent during the Plan period;
- ensure 4.9 per cent and 9.9 per cent per annum growth in agriculture and manufacturing sectors respectively;
- bring down the overall budget deficit from over 7 per cent of GDP in 1992-93 to less than 4 per cent at the end of the Plan period;
- improve the ratio of national savings to GDP from 15.8 per cent in 1992-93 to 19.9 per cent in 1997-98 and reduce the ratio of external resources from 4.2 per cent to 2.1 per cent during the Plan period; and
- improve the level of employment by creating 6.2 million new job opportunities.

SOCIAL

- reduce the rate of population growth from 2.9 per cent to 2.7 per cent by the terminal year;
- increase the literacy rate from 35% to 48%;
- attain universal primary education enrolment in the first year class, both for boys and girls;
- safeguard the rights of survival, protection and development of children;
- provide basic health service at each union council;
- increase the life expectancy from 61 to 63 years;
- reduce the infant mortality from 86 to 65 per thousand live births;
- achieve full immunization of mothers and children;
- provide potable water to 70.5 per cent of population in rural and 95 per cent in urban areas;

- provide 80 per cent of the urban and 31.5 per cent of the rural population with sewerage facilities; and
- improve environment and launch a nationwide conservation programme.

3. The sectoral growth targets of the Plan are set out in Statistical Appendix Table-II-1.1. The consequential structural change is shown in Table-1.1

Table-1.1
Structural Change in GDP
(% share in GDP)

	<u>7th Plan</u> (average)	<u>8th Plan</u> (average)
Agriculture	24.5	22.1
Industries:	26.7	29.3
- Manufacturing	17.6	20.3
- Others	8.4	9.0
Services	49.5	48.6
GDP	100.0	100.0

Land Marks

4. The major landmarks of the Plan in social, physical infrastructure and production sectors are given in Annex-I. Details are given in relevant chapters.

II-2

ENABLING ENVIRONMENT

a- STIMULATING PRIVATE INVESTMENT

Policy and Strategy

The private sector is expected to play a key role in investment, production, distribution, research and development, human resource development and generation and mobilization of resources in the Eighth Plan. The main elements of the strategy to support this role would be the following:-

- adoption of appropriate fiscal, monetary, trade, exchange rate, industrial and other policies to attract private investment (domestic and foreign);
- expanding infrastructural facilities in the public sector, with the participation of private sector;
- developing human resources;
- ensuring macroeconomic stability;
- maintaining law and order; and
- effective use of exchange rate to sustain the competitive position of Pakistan but not to offset decline of productivity.

2. Foreign investment has a significant role in the promotion and diversification of economic growth, importation of new technology, modern management and marketing techniques. For the promotion of direct foreign investment the government has already enacted an extensive package of incentives including de-regulation and liberalisation of foreign exchange regime. There is no ceiling on the share of foreign equity investment. The foreign investors are free to invest in stocks of existing companies, marketable securities or financial papers. Capital can be freely transferred or repatriated. There is no limit on the payment of royalties or technical fees. Pakistan Investment Board has been established to promote private foreign investment in industries like telecommunication, energy etc. Private long term capital (net) is forecast to add up to \$ 3700 million (Rs 102.6 billion) over the Plan period or 8.8 percent of the Plan's private investment. The main thrust of the strategy is to ensure larger equity-based inflow of external resources as against loan-based resources.

3. On the fiscal front, efforts will be made to simplify and streamline the tax system, broaden the tax base and reduce budget deficit. Fiscal policy will be used as an instrument of mobilizing savings and investment both in the public and private sectors and channelizing resources towards desired areas. Administered or regulated prices will be phased out.

4. In liberalizing and deregulating the monetary and financial policies, attempts will be made to mobilize larger savings in the household and corporate sectors by ensuring real positive return and building market confidence. New financial instruments will be introduced and financial institutions strengthened to induce people to save and invest in productive areas. Money supply will be managed through indirect tools, commensurate with the expanded role envisaged for private sector.

5. Trade would be liberalized, and tariffs lowered to promote competitive strength and facilitate production.

6. The capital markets will be strengthened and expanded. Steps will be taken to promote secondary market for the sale and purchase of government and private financial instruments and for greater financial mediation. Private sector will be encouraged to form specialised financial institutions like housing finance companies, investment banks and farm and small scale industrial financing institutions.

Investment Projections

7. Private investment in the Eighth Plan is projected at Rs 948.4 billion (at 1992-93 prices) or about 55.8 percent of the total development outlay Statistical Appendix Table-II-2.1. This investment is, however, indicative; actual investment will depend upon the initiatives and the priorities of the private entrepreneurship and the macroeconomic policies of the government. While support for private investment in the traditional areas of agriculture, transport and housing would continue, a larger role for private sector is envisaged in physical infrastructure and social sectors. The dominant thrust of private investment would be in the field of energy and manufacturing.

8. **Energy:** The participation of private sector in the power generation was allowed in 1985. However, the physical progress remained slow with hardly 1.6 percent of the investment target having been achieved. Except the identification, documentation and processing of projects with donor agencies no progress was made during the Seventh Plan. This deficiency would be made up during the Eighth Plan, which would rely on private sector for thermal generation. Besides power, the private sector, is expected to attract large investment for the exploration, development and distribution of oil and gas. For the fuel and power sector, an indicative investment of Rs 134 billion has been provided.

9. As a measure of financial support, the Government has set up a Private Sector Energy Development Fund (PSEDF). The Fund provides upto 50% of the foreign exchange costs of the approved projects or upto 30% of the total cost of projects whichever is less. Commitments of \$ 340 million have been secured from the World Bank (\$ 135 million), Japan Ex-Im Bank Loan (\$ 146 million), USAID Grant (\$ 46 million) and Nordic Investment Bank (\$ 13 million). The Fund is administered by the NDFC.

10. **Manufacturing:** Private sector contributes over 96 percent of investment in manufacturing. It thus exerts a great influence on the industrial structure. As the activity of the private sector is regulated by the laws governing the market mechanism, the entrepreneur's decision to develop the industrial structure on the pattern suggested in the Plan will be influenced indirectly within the framework of the industrial policy already announced. For the promotion of investment in priority areas, the development strategy envisages the establishment of special estates, loaning facilities through DFIs, easing conditions for the import of raw materials, spare & equipments, and training in exports promotion and quality improvement.

11. For a rapid and even spread of industrialization, Government plans to establish "Special Zones" with all the basic facilities throughout the country. Any private concern interested in setting up private special zones on their own, would be provided the required land. Full autonomy has already been given to the DFIs to sanction projects within the framework of Charter already evolved for DFIs. A Non-Bank Financial Institution/Department (NBFI) has been set up in the State Bank of Pakistan for monitoring and regulating the activities of non bank financial institutions.

12. A sum of Rs 365.2 billion (which is 38.5% of total private investment) has been provided as an indicative investment for the manufacturing sector, comprising Rs 315.2 billion in the large and Rs 50.0 billion in the small scale manufacturing sector. Besides the balancing and modernization of existing plants and machinery, a significant increase in capacity is expected in existing industries.

13. While the development of agro-based industries is essential to create demand for agriculture raw materials, the pressing economic needs call for rapid changes in industrial structure. Private investment would be encouraged for the expansion and modernization of fertilizer, basic chemicals, petroleum refining, auto-assembly, building materials, light engineering and electronics.

14. **Agriculture:** An investment of Rs 90.8 billion is projected for the Agriculture sector which is 9.5 percent of the private sector total Plan investment. Besides the non-monetized investment in construction, tools and implements, the major components of private investment are tractorization, installation of tube wells and purchase of agricultural implements and machines. During the Eighth

Plan, it is proposed to induct 1,51,200 tractors and install 30 thousand tube wells. In addition, substantial investment is expected in farm machinery (thrashers, harvesters etc.). The development programme will be supported by credit facilities.

15. **Transport and Communications:** Private investment in the transport and communications sector so far has been confined to road transport vehicles. However, in view of Government policies to privatise a large segment of transport and communication services presently in the public sector, the Eighth Plan has proposed an indicative provision of Rs 185 billion which inter-alia, includes telecommunications, air transport and port terminals. A new Transport Policy, expected to give boost to the road transport sub-sector, has been implemented towards the end of the Seventh Plan. The private sector is also expected to enter the fields of communications, aviation, airways, ports and shipping in a big way.

16. **Ownership of Dwellings:** Provision of shelter is one of the basic needs. It is estimated that about 2.5 million housing units will be required to meet the demand of additional population. The construction of houses is encouraged through the award of proprietary rights to the kachi abadi dwellers, the allotment of seven and three marla plots to the shelterless throughout the country and promotion of Township Schemes and Area Development Authorities. The sector has recently developed into the largest one among the services sectors. Therefore, an investment to the tune of Rs 110 billion has been proposed during the Eighth Plan. The proposed investment is just an indicative and may even be much higher if replacement need is also taken into consideration.

17. The Government have announced a National Housing Action Plan (NHAP) with a revolving fund of Rs 2 billion as seed money which would be mobilized through private sector and personal savings. Plots would be developed with special emphasis on 3 and 7 marla plots scheme. Besides the House Building Finance Corporation, two banks (PICIC and Citi-bank) and four housing finance companies/banks have been allowed to finance the housing development projects. More private financing institutions are expected to enter the field during the Eighth Plan.

18. **Services/Others:** The indicative investment for other sectors as a whole is placed at Rs 63.4 billion. This includes hotels, motels, office buildings and equipments and furniture and fixtures, trade, tourism, training and insurance, health, education, dry cleaning, the construction of new markets, shopping plazas and increasing use of computers, accounting and office machines.

19. Private sector can play an effective role in the provision of health, education and social services in the country. Apart from individual efforts a number of special organizations (NGOs) are engaged in the provision of such services. This would be expanded with the provision of utilities services and easy loan facilities.

II-2

ENABLING ENVIRONMENT

b- SOCIAL ACTION PROGRAMME

Objectives and Strategy

A disturbing feature of the economic performance of Pakistan in the past has been a persistent dichotomy between a respectable rate of economic growth and only a marginal improvement in social indicators. It has maintained an average growth rate of GDP of 6% during the past three decades. In inter-country comparison, according to the data compiled by the World Bank on the GDP growth rate during the 1980s, Pakistan stands at 6th position, falling after South Korea, China, Hong Kong, and Singapore. In the country comparison on social side, Pakistan ranks 132 compared with 86 for Sri Lanka and 101 for China (Human Development Report by UNDP 1993).

2. In key social indicators like adult literacy, life expectancy, nutrition, access to clean water and sanitation, Pakistan does poorly compared with countries like India, Egypt and Indonesia, which have enjoyed lower growth and are in the same per capita income range in terms of purchasing power parity. With an adult literacy rate of 35 percent, Pakistan has one of the worst profiles in the world. Life expectancy is low. Mother mortality rate is the highest in the world. Nutrition is inadequate. Access to clean water and sanitation is patchy. The situation is worse if gender rural, urban, regional disparities are taken into account. Population growth is among the highest in the world. Some of the major indicators of Pakistan viz-a-viz the selected countries in the following table-2.1 testify to this sorry state.

Table-2.1

Key Indicators of Selected Countries

Indicators	Egypt	Indonesia	India	Pakistan
Growth Rate (%)	4.9	4.8	1.8	4.2
Population Growth (%)	2.4	2.2	2.2	3.0
Infant Mortality Rate (per thousand live births)	62	61	84	86
Under Five Mortality Rate (per thousand live births)	85	86	126	134
Fertility Rate	4.3	3.3	4.2	6.2

Low Birth Weight Babies (%)	10	14	33	25
Contraceptive Prevalence Rate (%)	38	48	34	11
Adult Literacy (%)	44	74	43	36
Primary School Enrolment (% of age group)				
Boys	104	120	112	84
Girls	89	115	82	53
Life Expectancy at Birth	60.3	61.5	59.1	57.7
Calorie Supply Per Capita (% of Daily Requirement)	127	120	94	92
Access to Safe Drinking Water (% of Population)	89	58	75	60
Access to Sanitation (% of Population)	65	39	16	30
Public Expenditure on Education (% of GNP)	6.8	6.9	3.2	2.4
Public Expenditure on Health (% of GNP)	1.1	2.1	0.9	0.7

3. The maternal mortality rate has been 500 per 100,000 live births, largely because many of the pregnancies are too early, too late, or too close together. There are only two countries in the world with a higher percentage of low birth rate babies than Pakistan's 25%. Although Pakistan's infant mortality rate has fallen from 148 in 1960 to 90 in 1994, the progress has not been as significant as the average low income countries. Girls are specially vulnerable.

4. In economic sphere the returns to human capital have been found to be no less important than the returns to physical capital. Pakistan could have bettered its own record of growth by investing more in social sectors. In addition to gains in productivity investment in social services increases quality of development, equality of opportunity, opportunity of specialization and contributes to the alleviation of poverty. The poor are disproportionately disadvantaged particularly the rural poor. SAP would thus promote productivity, reduce poverty, and encourage smaller, healthier, better educated families. Provision of basic social services would bring women into the mainstream of economic activity. Education, nutrition, health, family planning, water and sanitation-generate mutually reinforcing benefits and enhance the economic capabilities of the poor. Education particularly of women, helps bring down fertility, stimulates demand for

health care and sanitation, easing pressure on environment. Improvement of hygiene, in turn, reduces infant mortality and contributes to population control. It also reduces burden on curative health. Social Action Programme would thus bring benefits which are larger than the aggregation of its components.

5. Eradication of illiteracy will be taken up as a motivational campaign and as one of the main foci of the SAP. Special incentives will be devised to eliminate it. These efforts will be supplemented with the support of larger current expenditure, community participation and better management of social sectors. The accelerated development funding is required not only to sustain physical facilities and provide salaried staff but also to increase non salary components to improve and maintain quality of services. About 77% of total provincial current expenditure will be required for primary education alone. The participation of NGO's is sought for expanding the reach of programme activities, evolving partnership between Government and Non-Government sectors, and closing the communication gap between government and the people particularly those living in the rural areas. The services will no longer be unwanted, under-used or poorly maintained. The SAP will include a programme to explore new approaches for involving communities, testing innovative ways to deliver social services at the door steps.

6. The Social Action Programme (SAP) was launched in 1992-93. Initially a 3-year SAP (92/93 to 95/96) was formulated, which was overtaken by the exercise carried out for the 8th Five Year Plan. Hence a 5-year SAP (93-98) has been formulated.

7. In order to make the programme manageable, SAP was given a tight definition designed to address the basic social services. The SAP has five major components:

1. Basic education;
2. Primary health;
3. Nutrition;
4. Population Welfare and
5. Rural Water Supply & sanitation.

Within these areas, the focus is on the most vulnerable or marginalized groups of society, e.g., female education, infants care, unreached rural inhabitants.

8. The main responsibility of implementation lies with the provincial governments, who would need to invoke the NGOs and private sector.

9. The salient features of the strategy are summarized below:

In education, there shall be greater emphasis on primary education, particularly girls education. Annual rate of increase in the enrolment of girls is projected at more than twice that for boys. During the Eighth Plan, 61 per cent of the new seats in schools will be for girls. Priority would be given to improvement of school environment and teacher training, and increased availability of teaching aids and quality textbooks. These inputs will be complemented by incentives such as nutrition for girl students, security and transport for female teachers in rural

areas, regulation of child labour and compulsory enrolment, where schools are adequate. For girls primary schools, the government will buy land if the community is not able to provide free land in an easily accessible area. These measures are expected to reduce the drop-out rate. Co-education will be introduced at primary level under female teachers, wherever feasible. In provision of buildings, shelterless schools would receive priority.

In primary health emphasis would shift from physical infrastructure to consolidation, improvement and upgradation. The outreach programme would be reinforced by the induction of village health workers. Health outlets will also be involved in the delivery of family planning services. Efforts will be made to introduce in these health units nutritional components as well.

In family planning, the unreached rural areas will be covered through village-based female workers. Initially 12,000 workers are being induced for delivery of services at door-steps of the rural people. Information, education and communication strategy will focus on male as well as female motivation.

In rural water supply and sanitation, community participation, cost recovery and affordable technology will be the guiding principles.

Equity in the provision of social services will be ensured through wider coverage of the rural areas, and urban poor.

Each implementation agency will be required to prepare a detailed operational plan, covering appropriate policy, budgetary, institutional and administrative changes amenable to decentralised and participative planning, implementation and monitoring.

For public expenditure programmes, performance goals have been identified and articulated.

Inter-sectoral as well as intra-sectoral priorities will be restructured. A rational public-private sector mix would be ensured.

For effective and efficient execution of SAP, operational responsibility of implementation would eventually rest with community organizations. Decentralized implementation framework involving male and female representatives in line departments, local bodies, private sector and NGOs would be involved. Capacity of concerned agencies to undertake community organization and to prepare and implement sound participative projects, programmes and policies, will be improved.

Participatory mechanisms embodying broad-based, decentralized, local organizations at the village and neighborhood level have already been initiated in some districts of NWFP, Balochistan and Northern Areas.

Selection of sites for various SAP would be determined by District Committees which would be attended by MNAs, MPAs, chairmen of district councils, mayors of municipal corporations and heads of municipal committees.

With a view to encouraging private sector investment and involvement in social sectors, education and health foundations are being set up in all provinces. These foundations will provide financial assistance to individuals and institutions for creation of infrastructure for education and health care. They will be encouraged to take up more activities in the rural areas. Funds to these foundations will be provided on matching grant basis.

Consideration will also be given to privatise some of the existing BHUs and RHCs.

10. Further details on the SAP strategy in terms of implementation framework, sectoral programmes, allocations and financing are provided below:

Management Issues

Sectoral Implementation Issues

11. *Primary Education:* In primary education, improved access, and quality enhancement would be the key areas. For effective planning and supervision, separate provincial directorate and district education officers would be established. District officer would undertake a mapping exercise to rationalize geographic disposal. They would also help oversee construction, maintenance and rehabilitation of school buildings, arrange recruitment of teachers on competitive basis from local population. Where teachers are in short supply, especially the female teachers, they would arrange training. Supply of books and standardized equipment for primary schools would be streamlined.

12. Co-education under female teachers will be encouraged. Female teachers working away from their place of domicile will be given special incentives. To ensure community participation, supervision and evaluation of primary schools activities will be carried out by local communities through parents-teachers committees.

13. *Primary Health:* All union councils in Pakistan now have a basic health facility. The programme will focus on efficiency of service delivery and quality. Health and population welfare will be coordinated. Decentralization would be encouraged. The critical female cadres of nurses and paramedical workers will be recruited through District Recruitment Committees. Criteria for admission to the Schools of Public Health, Female Health Technicians, and Regional Training Institutes would be standardized. All the three training programmes would develop a standard curriculum covering maternal and child health and family planning. Regular and periodic in-service training would be made a part of career structure and career development. Opportunities for training of personnel in rural and "unattractive" posts would be improved. Senior level female positions at district and provincial levels would be established. A position

of Ombudsperson to provide an alternative to the existing government system for female workers would be established.

A key objective of is to institutionalize the process of increasing community involvement and the decreasing burden on the recurrent budget. An effective system of supervision and monitoring of health activities would be established by entrusting the local committees with the responsibility of supervising the functioning of BHUs in their area. Budget for non-salary inputs would be enhanced.

14. *Nutrition:* As nutrition is multi-sectoral in nature, actions on many fronts are needed. The objective of SAP is to provide supplemental foods and nutrients to those who need additional food during changed physiological conditions. Participatory and distribution aspects, and nutrition education through multimedia would be adequately addressed. Access will be improved by using primary health care outlets. Measures will be taken to strengthen the information base and monitoring arrangements.

15. *Rural Water Supply and Sanitation:* This is one of the major areas of activity in which local councils are involved, providing community representation in identification, construction, maintenance and recovery of user charges. Presently the provision of water supply is being carried out by the Departments of Public Health Engineering (PHED) and the Local Government and Rural Development (LGRD). PHEDs mostly implement schemes based on pipe system while the LG & RD Departments are responsible for provision of hand pumps. Operational capabilities of these agencies will be strengthened and meaningful involvement of community institutions in identification, planning, execution and, most significantly, operation and maintenance to ensure, for sustainability will be instituted. Least-cost, affordable designs and technologies will be adopted. Operation & Maintenance Costs of completed rural water supply schemes will be the responsibility of community.

16. *Family Planning:* The most critical implementation issue in family planning is to work out a reliable contraceptive supply plan to meet the demand to be generated through a massive campaign of information, education and communication. Measures will be taken to ensure greater involvement of the provincial governments and health outlets in the family planning programme. Community-based workers will be trained as motivators and service providers. Community participation will also be ensured in supervision, monitoring and vigilance at implementation levels.

17. *Capacity Building:* Measures will be taken to introduce programme planning and budgeting system in social sectors. For preparation of operational plans and rolling public sector investment programmes and for monitoring and approving the various stages of the project cycle, the concerned institutions will be strengthened. The health management information system (HMIS) will also be improved by (i) replacing existing routine reporting system in all government managed first level care facilities by a comprehensive and integrated HMIS (ii) improving the existing disease surveillance system and (iii) strengthening computerized HMIS both at the federal and provincial levels. The data base from district to national level will be

strengthened and the National Education Management Information System (NEMIS) institutionalized.

Consolidation and Rehabilitation

18. To overcome a serious imbalance in social sectors, recurring investment, especially on non-salary inputs in education and health sectors will be programmed along with development expenditure. In Health Sector, the major thrust would be on upgradation. A total of 3,874 BHUs will be upgraded during the Eighth Plan period. The opening of new RHCs will not be encouraged: the thrust again would be on upgradation. 492 RHCs out of a total of 553 will be upgraded during the Plan period.

Landmarks of Eighth Plan

19. *Basic Education:* Primary education especially girls education is the central focus of the SAP. The overall participation rate, for boys and girls in public and private schools, at present comes to 69 percent. Barring Punjab, all provinces are below the national average. The lagging provinces will have to achieve an annual increase in enrolment well above that of the Punjab. The participation rate for girls will increase from 53.7 percent to 81.6 per cent in 1997-98. Girls would constitute 61 per cent of the additional enrolment during 1993-98 (Table 2.2 below). Details at Statistical Appendix Table-II-2.2.

Table-2.2
SAP: Eighth Plan Targets
(Basic Education)

	1992-93 Benchmark	1997-98 Targets
Primary School Participation (000)		
Total	12,414 (68.9)	17,962 (87.7)
Boys	7,792 (84.8)	9,944 (95.4)
Girls	4,622 (53.7)	8,018 (81.6)
	37	45
Ratio of Girls Enrolment to Total Enrolment (%)		
Adult literacy (%)		
Male	47.3	61.5
Female	22.3	33.5

Note: Figures in parenthesis show participation rates.

20. The enrolment capacity will be increased through the creation of 5.548 million new seats (3.396 million for girls) by opening new primary schools, mosque schools and addition of classrooms in existing schools. Additional facilities in the existing schools, like construction of boundary walls, provision of buildings for shelterless schools, latrines and drinking water facilities will also help realize the enrolment targets. The utilization of the increased enrolment capacity will be ensured through (a) effective legislation to control child labour, as per commitment in the National Programme of Action for Children, (b) compulsory enrolment in areas where facilities become available at a reachable distance, and (c) introduction of co-education. To achieve the accelerated targets for girls enrolment, supply of female teachers, the training and improvement in their services conditions - higher allowances, relaxation of age, experience and qualification, provision of transport, security and appropriate transfer and posting policy - will be ensured. Further, incentives may be provided in terms of nutrition. Drop-out rates will be checked by providing improved environment in the schools. Extensive teacher training will be planned by each province to improve the quality and relevance of education. Adult literacy programmes will receive a boost with start of the second TV channel. The illiteracy-free Islamabad project and pilot efforts in selected districts in the provinces will serve to revive the dormant literacy programme. The adult literacy rate would improve from 47.3 to 61.5 per cent for males and from 22.3 to 33.5 per cent for females.

21. *Primary Health:* Inadequate Primary Health Care (PHC) and related issues of equity are important concerns of the SAP. An active preventive programme and a vigorous promotional programme are its crucial ingredients. In rural areas Basic Health Unit (BHUs) and Rural Health Centres (RHCs) have been set up to provide PHC. However, as these centres are beset with problems of under-staffing, under-equipment and under-utilization, these are no way near to realizing their goals. At the village level there is no organized public health system and no linkage with the community which is contrary to the basic philosophy of PHC. In urban areas

PHC is provided through health facilities of local government and through outpatient departments of secondary and tertiary hospitals. These health outlets have serious shortages of medicines, equipment and space. Emphasis will therefore be placed on strengthening primary health care system. Major targets in this sector may be seen in Table 2.3 below.

Table 2.3
SAP: Eighth Plan Targets
(Primary Health)

	1992-93 Benchmark	1997-98 Targets
Immunization (000)	3,557 (80%)	4,902 (90%)
ORS (000 packets)	13,530	23,595
TBAs(Nos)	6,465	16,469
CHWs (Nos)	60	14,036
Infant Mortality Rate (per thousand live births)	86	65
Maternal Mortality Rate (per 100 thousand live births)	300	150
Life expectancy (years)		
Male	61.6	63.6
Female	61.2	63.3

Note: Figures in parenthesis show percent of population covered in age group 0-1 and backlog of less than two years not covered previously.

22. Expanded Programme of Immunization (EPI) is a priority programme. It is one of the essential components of the child survival programme, other components being (i) control of diarrhoeal diseases (CDD), (ii) acute respiratory tract infections (ARI) and (iii) nutrition. The SAP will reinforce efforts to enhance EPI national coverage of age group (0-1), from 80 per cent to 90 per cent by 1997-98. The provinces of Balochistan and Sindh would be provided all assistance to increase their coverage. The distribution of Oral Rehydration Salts (ORS) will be accelerated from present level of 13.5 to 23.6 million units by 1997-98. As a result of these efforts, combined with other policies of education and nutrition, the infant and maternal mortality rates would be reduced substantially. The infant and maternal mortality rates would be reduced by 21 and 1.5 per thousand live births. Life expectancy would increase from 61.6 to 63.6 years for males and from 61.2 to 63.3 years for females.

23. In addition to the existing system of BHUs and RHCs, a programme of community health workers (CHWs) will be introduced to disseminate PHC to the community. During the Eighth Plan, 37,811 CHWs will be selected by the communities and trained and supervised by the professional staff of BHUs/RHCs who will be adequately trained for this function. CHWs will act as a bridge between the community and the health units which at the moment appear isolated from their catchment population. As training of CHWs is a new initiative, a modest beginning will be made by selecting two districts in each province initially and spreading the programme gradually by learning from experiences gained. As provision of MCH services to everyone is among the priority areas of SAP, the ultimate objective is to train one female CHW for each census village. Through an accessible training programme, 57,744 Traditional Birth Attendants (TBAs) will also be trained.

24. PHC for the poor in all major urban areas will be provided by Mohalla (Urban) Health Centres. 616 centres will become operative by 1998, which will be staffed and maintained by local bodies/communities. These centres will concentrate on preventive activities and MCH care i.e. immunization, CDD, ARI, antenatal and post-natal care and clean deliveries.

25. In the past, BHUs and RHCs in the past have grown in numbers and size. It is proposed to upgrade the rural health system and improve the quality of care to the extent that RHCs are able to take care of (i) pregnant women with life threatening conditions (ii) critically sick children and (iii) trauma/burns. To improve referral care and bring it closer to health facilities in the rural areas, BHUs/RHCs will be upgraded and made fully functional. Upgrading will involve availability of staff, improvement of skills of staff and adequate provision of equipment and transport.

26. The total number of union councils in Pakistan is 4,565* in which 4,527 BHUs are operating. In some union councils more than one BHU is operating. During the Eighth Plan period, 252 new BHUs will be established to cover some gaps. However, the major thrust would be on their upgradation so as to provide first care services in these units. A total of 3,874 BHUs will be upgraded. The opening of new RHCs will not be encouraged, except in Balochistan where 40 out of the 45 new units are to be located to improve coverage. The thrust again would be on upgradation. 492 RHCs out of a total of 553 will be upgraded (Table 2.4). In Northern Areas, dispensaries have been set up to extend coverage to small population settlements. A total of 103 will be improved to enhance quality. Detailed targets of primary health for the Eighth Plan are presented in Statistical Appendix Tables-II-2.3 and 2.4.

* Economic Survey, 1993-94.

Table-2.4
SAP: Eighth Plan Targets
(Rural Health Facilities)

	1992-93 (Benchmark)			1993-98			
	Union Councils	RHCs	BHUs	RHCs		BHUs	
				New	up- graded	New	up- graded
Punjab	2476	296	2480	5	300	30	2350
Sindh	676	81	571	-	61	81	50
NWFP	756	74	699	-	70	-	700@
Balochistan	360	42	448	40	35*	120	350@
FATA	-	4	115	-	-	20	140
AJ&K	182	30	150	-	-	-	271@
Northern Areas	103	23	51	-	23	-	-
ICT	12	3	13	-	3	1	13
Total:	4565	553	4527	45	492	252	3874

* This represents conversion of BHUs into RHCs.

@ This includes some dispensaries to be upgraded

27. Malaria eradication programme has shown success and the disease has been brought down from an annual incidence of 13 cases during 1973 to 0.89 case per thousand population during 1991. The incidence will be further reduced to 0.5 case per thousand population by the end of the Eighth Plan. Selective insecticide spray will be a key component.

28. About 30,000 persons are suffering from leprosy. Effective treatment to at least 80 per cent of the total cases would be ensured. A leprosy awareness campaign has already been launched to facilitate voluntary reporting of the new cases.

29. *Nutrition:* In spite of significant improvement in the food supply situation, malnutrition continues to be serious in Pakistan. Its implications for child mortality either by itself or in combination with various diseases, as well as its impact on human capital formation, labour productivity and social well-being are well known. The following programmes (paras 30-32) are proposed to overcome some of the factors responsible for persistent and widely prevalent malnutrition in Pakistan.

30. *Nutrition in Primary Health Care:* The nutrition component in primary health care will be strengthened and a nutrition delivery system would be put on the ground by (i) establishment of nutrition clinics in BHUs and RHCs, (ii) nutrition surveillance system through growth monitoring and promotion and (iii) food demonstration for improved feeding, weaning and supplementary feeding of children and mothers.

31. *School Feeding Programme:* A girls school feeding programme will be introduced. It will not only improve the nutritional situation but also act as an incentive for the children to come to schools. The programme start for girls covering about 2.87 million students throughout the country. Its implementation will be carried out through the NGOs.

32. *Interventions for Diseases of Nutritional Origin:* Micro- nutrient deficiency such as iodine, iron and vitamin A are severely affecting a sizeable segment of population, particularly the vulnerable groups and the population in the Northern Areas which is among the world's most severe endemic areas of iodine deficiency. It is estimated that about 15-20 million people are at risk for the full spectrum of iodine deficiency disorders. A three pronged strategy of salt iodization, iodine oil capsules and injections is to be launched to eradicate the problem. Iron deficiency anaemia of nutritional origin and protein energy malnutrition are the other serious problems. About 65% of children and 45% of women of child bearing age and almost 90% of lactating and pregnant mothers are suffering due to anaemia. Distribution of iron sulphate through PHC network coupled with proper nutrition education will be launched to control anaemia. Vitamin A deficiency though not widely prevalent has been reported in certain slums. Its control would be introduced on a case to case basis. Major targets for nutrition during the Eighth Plan period may be seen at Statistical Appendix Table-II-2.5. The projected progress on key performance indicators is given in Table 2.5.

Table-2.5
SAP: Eighth Plan Targets
(Nutrition)

	1992-93 Benchmark	1997-98 Targets
Calorie supply per capita (% of daily requirement)	102	107
Low birth weight babies (%)	20	13
Under weight mothers (%)	34	15
Malnutrition in children below 5 years of age (%)	25	15
Goiter prevalence(%)	1.5	0

33. *Rural Water Supply and Sanitation:* The overall national coverage in 1992-93 in respect of water supply works out to 47.14 per cent while in case of sanitation it is 13.54 per cent. It is proposed to provide water supply to an additional population of 27.41 million during the next five years, which will give an overall coverage of 70.5 per cent by the end of 1997-98. In case of sanitation, it is proposed to reach an additional population of 18.81 million during 1993-98 which will provide a coverage of 31.5 per cent by the end of 1997-98 (Table 2.6). Detailed physical targets of rural water supply and sanitation for the Eighth Plan are presented at Statistical Appendix Table-II-2.6.

Table-2.6
SAP: Eighth Plan Targets
(Rural Water Supply and Sanitation)

(Population in Million)

	1992-93 Benchmark	1997-98 Targets
Rural Water Supply	41.08 (47.14)	68.49 (70.51)
Rural Sanitation	11.80 (13.54)	30.61 (31.51)

Note: Figures in parenthesis show per cent of population covered by each facility

34. *Family Planning:* The rate of population growth would be brought down from 2.95 per cent in 1992-93 to 2.74 per cent by the end of the Eighth Plan. Priority would be given to expansion and improvement in service delivery network particularly in the rural areas. A strong information, education and communication (IEC) campaign will be launched. To optimise the use of mass media, an innovative strategy will be adopted. The role of provincial population welfare departments will be enhanced and coordination between population and health departments ensured. The number of outlets offering family planning services will be expanded. Private sector will be involved in social marketing of contraceptives.

35. By the end of the Eighth Plan, the family planning coverage will be expanded to cover the entire urban population and 70 per cent of the rural population. With a view to achieving the high-pitched rural target, an innovative scheme has been designed. From each union council will be selected at least two married women of 25 or more, educated upto the 8th class, and based in villages with a 2000-plus population. The total number would be 12,000 women, who would be given three to four months training. The cadre would be trained at tehsil level, and contracted at a fixed amount of Rupees one thousand per month as a retainer fee. Medicines and stationery items worth Rs 200 per month would also be provided. These workers would establish service points at their houses, register eligible married women in households of their respective villages, visit the eligible women on regular basis for motivation, counselling and provide service delivery at the doorsteps and refer cases of surgery and IUD to the nearby Reproductive Health Service Centres or Family Welfare Centres. They would also be responsible for maintaining records of family planning acceptors and periodic reporting. To improve efficiency, continuity of contraceptive use and quality of service, these community based workers would be supervised by the Family Welfare Centres.

36. The progress expected in selected performance indicators during the Eighth Plan period is given in Table-2.7. Other targets may be seen at Statistical Appendix Tables-II-2.7 and 2.8.

Table-2.7

**SAP: Eighth Plan Targets
(Population Welfare)**

Year	Married Women (Mil.)	TFR	CBR	CDR	Pop. Growth Rate	Rate of Natural Increase	CPR (per cent)	Users (million)
1992-93	19.36	6.0	38.99	10.00	2.95	2.90	14.0	2.71
1993-94	19.90	5.9	38.44	9.83	2.91	2.87	15.5	3.08
1994-95	20.46	5.8	37.96	9.65	2.86	2.83	17.4	3.55
1995-96	21.05	5.7	37.36	9.45	2.81	2.79	19.5	4.10
1996-97	21.69	5.6	36.74	9.23	2.77	2.75	21.8	4.72
1997-98	22.36	5.6	36.00	9.01	2.74	2.70	24.4	5.46

TFR: Total Fertility Rate; CBR: Crude Birth Rate;
CDR: Crude Death Rate; CPR: Contraceptive Prevalence Rate

Financial Arrangements

37. On the basis of the unit costs (Statistical Appendix Table-II-2.9) carefully worked out for various elements in the programmes described above, the total size of the SAP during the Eighth Plan works out at Rs 102.4 billion in 1992-93 prices. The provincial share comes to Rs 81.8 (80%). The allocation of development expenditure for SAP elements in 1991-92 was Rs 6.82, billion which accounted for 0.57 per cent of the GDP. To accelerate the pace of social sector development, the allocation for 1992-93 was placed at Rs 10.1 billion, increasing the ratio to GDP (mp) to 0.80 per cent. The ratio is expected to increase to 1.33 percent by 1997-98. To realize the envisaged targets in coming years, this high tempo of development expenditure growing annually at 21 per cent, will have to be maintained over the period of Eighth Plan (1993-98). The agency-wise allocations are given in Table-4.8. Further break-down and sectoral details are given at Statistical Appendix Tables-II-2.9 to 2.14.

Table-2.8
SAP: Development Allocation

(Billion Rs)

	1992-93 Bench- mark	1993-94 First Year	1997-98 Terminal Year	1993-98 Eighth Plan
A) PROVINCES	8.5	12.0	21.6	81.8
Punjab	4.2	6.0	11.5	42.6
Sindh	1.9	2.8	4.1	17.1
NWFP	1.5	2.1	3.7	14.1
Balochistan	0.9	1.1	2.3	8.0
B) FEDERAL	1.6	3.2	4.7	20.6
Ministries	1.0	2.3	3.3	14.7
Areas	0.6	0.9	1.4	5.9
Total (A+B)	10.1	15.2	26.3	102.4
Development Allocation as % of GDP (mp)	0.80	1.02	1.33	

38. The accelerated allocation in the early years would require a major improvement in implementation capacity. The first year of the SAP would, therefore, focus on resolving planning, budgeting and implementation issues, so as to set the stage for investment in the subsequent years. Completion of on-going projects and rehabilitation of existing facilities would be accorded priority.

39. The main field of SAP operation lies in the provinces. Their allocations are determined on the basis of population, with weights of 5 per cent each attached to the shares of the less developed provinces of NWFP and Balochistan. The priority for SAP was ensured by adopting the following procedure. First physical targets were worked out on the basis of needs felt and expressed by each province. Rational unit costs were applied to these targets to arrive at the overall SAP size. This size was protected, through mutual consultations.

40. To protect the priority planned for the SAP, reappropriation from the SAP to non-SAP elements would be allowed only if it can be shown that the SAP targets are achievable at a lower cost.

Current Expenditure Plan

41. Recurrent expenditure programming has been a weak link in the planning for SAP sectors. The pattern of recurring expenditure highlights a number of major problems. First, the salary component is generally very high and there is very limited provision for purchases of durable repairs and maintenance, commodities and services. This has affected the quality of service provision. Second, lump-sum provision constitutes a significant component of the budgets. This reflects difficulties in expenditure budgeting and the scope for arbitrariness. Third, the overhead component appears to be high in education.

42. Under SAP, a framework has been worked out to plan the level as well as pattern of current expenditure together with the development expenditure. These plans will reflect the impact of quality-enhancing inputs, maintenance requirements, and the rehabilitation and upgradation needs of the existing facilities.

43. As may be seen in Table-2.9 the provincial SAPs envisage an annual average increase in current expenditure of 8.1 per cent in constant prices in basic education. This will not only insure additional staff in schools, but also a better provision of non-salary inputs to improve quality. In primary health, the need for quality inputs is even greater; the current expenditure is estimated to increase at 13.4 per cent in real terms over the Eighth Plan period. In rural water supply, the current expenditure of newly completed schemes will be borne by the communities. The province-wise current expenditure is given at Statistical Appendix Table-II-2.10.

Table-2.9
SAP: Current Expenditure

	1992-93 (Bench- mark)	1993-94	1997-98	Total 1993-98	Annual Increase (%)
PROVINCES					
Basic Education	12.61	13.68	18.61	80.38	8.1
Primary Education	12.45	14.31	19.78	84.71	8.1
Teacher Education	0.14	0.19	0.25	1.13	7.7
Primary Health	1.73	1.98	3.24	13.00	13.4
Rural Water Supply	0.62	0.80	1.08	4.68	11.7
FEDERAL	1.06	1.11	1.35	6.15	5.0
Total:-	16.02	17.57	24.28	104.21	8.7

44. In the financing arrangements for SAP, besides the contribution of the Federal Government and donors to development expenditure, the provincial responsibility will be to provide adequate re-current budget.

45. The issue of cost effectiveness of social sector expenditures is important. Greater cost effectiveness will not only help in making resources go further in achieving the targets for social indicators but it will also strengthen the case for getting higher allocations. For instance, a major area of wastage in education is the high drop-out ratio and low continuation ratio of students, especially of girls in the rural areas. Similarly, investment programming in the social sectors also suffers from a number of defects. The basic problem is the tendency to carry too large a portfolio of project as a result of which too many schemes are sanctioned to reconcile competing claims. The long gestation period of projects leads to cost overruns and frequently to only a partial implementation. Only projects which meet the strict selection criteria and are appropriately ranked, will be picked up for execution.

46. The extent of cost recovery (revenues as % of current expenditure) is generally low. Highest rates of cost recovery are observed in economic sectors like forestry (upto 90%) and irrigation (upto 80%). Corresponding magnitudes for the social sectors range from about 4% for the health sector and about 5% for the education sector. Keeping in view the criteria of equity, allocative efficiency, and private and social returns from services provided, a three point strategy will be adopted. First, higher pricing of economic services with significant private returns, second, increased user charges for private facilities in government hospitals, and allowing institutions to retain these charges to improve quality of service, and third, higher charges in urban areas for similar services in line with higher affordability levels. The strategy envisages removal of subsidies to the extent possible from economic services and diverting most of the savings to expanded provision and better maintenance of social services.

47. To sum up, the SAP aims at dealing decisively with the deprivation suffered by the Pakistan in terms of social services. The main instruments are adequate provision of financial outlays (current and development) and improvement in implementation framework by de-bottlenecking the system involvement of the community and NGO's and emphasis on decentralization. SAP would help raise the status of human development; women and children in particular. There would still be significant gaps in social indicators, but the Programme should ensure a decisive break through during the Eighth Plan.

II-2

ENABLING ENVIRONMENT

C- AUGMENTATION OF ENERGY AND PHYSICAL INFRASTRUCTURE

Expansion in the energy and physical infrastructure should normally be faster than the increases in demand to build up a cushion against disruption in supplies to cover uneven regional dispersion, and insure against unforeseen upsurges in demand. In Pakistan on the other hand, deficiencies have been growing. One of the primary objectives of the Plan, is therefore, to accelerate the pace of development in these areas and remove the imbalances in their growth. This alongwith the thrust in social sector development should improve the enabling environment for private investment. It would also provide external economies to private enterprise and reinforce its competitive strength.

2. In cognisance of these needs over 46 percent of the public sector allocation is assigned to fuel, and power, water, transport and communication and physical planning and housing sectors. In addition to public sector investment, the private sector will be encouraged to participate in the development of these areas on its own or in association with the public sector. The concept of public-private partnership is being extended to physical infrastructure sectors. Participation in these areas may involve sharing of cost in creation of assets, segmentation of activities as a basis of participation, BOT (Build, Operate and Transfer) transfer or leasing of management, pioneering role of public sector and privatisation of public sector enterprises. This policy will help enlarge the resource base for development of infrastructure. It would also be conducive to the efficiency and quality of these services.

3. The sectoral objectives, policies programmes and landmarks are discussed in detail in the relevant sectoral chapters. The landmarks, programmes and target in key sub sectors are given below:-

Energy

4. Major landmarks in the energy sector are:-

1. Power Generation Capacity up by 68% (to 16422 MW).
2. Oil Production up by 106% (to 123300 barrels a day).
3. Gas Production up by 38% (to 2554 MMCFD-Peak).
4. Refining capacity up by 183% (to 17 million tons per annum).
5. Electrification of 19700 villages.

6. Construction of Ghazi Brotha Hydel Power Project.
7. Thermal Generation in Private Sector.
8. Completion of Hub Project in Private Sector.
9. Privatization of Thermal Plants of WAPDA.
10. Utilization of Thar Coal.

5. Targets set out for the Eighth Plan are given in Statistical Appendix Table-II-2.15.

Water Resources Development

6. To facilitate production and boost the agro-based economy, surface water supplies would be augmented, public tubewells will be replaced with private tubewells, and an ambitious drainage programme organized to mitigate the effects of water logging and salinity.
7. Chashma Right Bank Canal, Pat Feeder Canal and Left Bank Outfall Drainage Project would be completed. Visible progress would be achieved on the Right Bank Outfall Drain. Water logging in the disaster area (1.4 million hectares) would be eliminated.

Transport and Communications

8. Major landmarks in the Transport & Communications are:-

1. Double rail track from Lodhran to Peshawar (880 Kms).
2. Manufacture of 1367 High Capacity Wagons.
3. Complete Indus Highway (1189 kms).
4. Complete Dualisation of National Highway (N-5) (1764 Kms).
5. Complete Lahore - Islamabad Motorway.
6. Work on Lawari Tunnel will be initiated.
7. Construction of Gwadar Port through Private Sector.
8. Clear all pending demand for telephone connections - 2.5 million new lines denoting 80% increase.

9. Eighth Plan targets for the Transport and Communications are given in Statistical Appendix Table-II-2.16

Rural Water Supply & Sanitation

10. Major landmarks in Rural Water Supply & Sanitation Sector are:-

1. Coverage of rural water supply to increase from 47% to 71% of population.
2. Rural sanitation coverage to go up from 14% to 32%.
3. Urban development and expansion of 3 and 7 marla schemes.

11. Physical targets of the Eighth Plan are set out in Statistical Appendix Table-II-2.17.

II-3

CRITICAL ISSUES

a- POVERTY ALLEVIATION

Introduction

Poverty is basically a reflection of dispossession or deficiency in resources that hampers or prevents participation of some sections of a society initially in growth process and consequently in sharing economic gains and thus inhibits them from realizing a reasonable standard of living. This also results in income inequality. "Poverty is thus manifested in low income, malnutrition, high incidence of diseases, illiteracy and poor living conditions". Causes and effects of poverty are intimately inter-linked and the factors which are the manifestation of poverty are also its close correlates.

2. The term poverty is used in relative terms and its connotation varied among societies and over times. Generally the poor are those who are in the lower slab of societal income distribution, particularly those who are not in a position to avail a minimum standard of living with certain food intake, clothing and housing facilities. Empirical evidence reveals that persistent poverty could become, in the long run, a threat to the social order, besides being a constant drag on human resources.

3. Poverty and hunger are mostly concentrated in the Third World. With three quarters of the world population, the developing countries possess one quarter of the world resources. According to the latest estimates, roughly 1/3rd (or over 1 billion people) of the total population of the developing countries live in poverty which is mostly concentrated in the rural areas. About 633 million live in Asia, 206 in sub-Saharan Africa and 76 million in Latin America. The poor comprise heterogeneous sections of small farmers, landless tenants, nomads, pastoralist, fisher-folk and unskilled urban labour. Most of the poor are under-employed. The rural poverty is continuously feeding unemployment through migration of unskilled labour to the urban areas. The largest victim of poverty are children and women who suffer most in terms of malnutrition, illiteracy, low life expectancy and substandard housing.

4. There is consensus among the scholars and policy makers that the people who do not work to alleviate their lot have to pay heavy economic and moral penalties. By crowding out a large segment of the society, human resource remains unutilized, potentials of growth and development remain untapped and the economy operates at sub-optimal level. This consequently constrains the capacity of the actively operative part of the economy. Thus persistent poverty poses impending threat to the future of the economy.*

*IFAD: The State of World Rural Poverty, 1992.

5. There is empirical evidence of strong interlinkages between growth, distribution and amelioration of poverty. Besides, a link of poverty with environmental degradation has also been established. Because of inadequate possession of resources, the poor consume their environmental assets for survival. Deforestation has been a major manifestation of this syndrome.

6. In Pakistan the strategies for poverty alleviation have been varying over time. In the early years some ad-hoc approaches were adopted to provide temporary relief to the poor. In subsequent period when systematic planning was started, high growth was chiefly considered a panacea for various economic problems including poverty. Towards the end of the sixties, it was realized that the trickle-down effect of growth process could not be expected to relieve the burden of poverty. The problem of income disparity especially at regional level assumed alarming proportions which was also used by some politicians as one of the justifications for the separation of the eastern wing of the country.

Poverty and Income Distribution

7. Absolute poverty and relative income distribution are the yardsticks to assess the incidence of poverty.

8. There is no universally accepted poverty line, it varies from country to country depending on the norms of income and expenditure patterns and availability of data. Expenditure-based poverty line is drawn with two elements: First, the expenditure necessary to buy a basket of foodstuff which fulfills the minimum standard of nutrition, normally expressed in terms of caloric intake (this is also called destitution line); Second, in addition to food, the expenditure needed to avail the basic amenities of life, like housing, education and health. The second being more subjective in nature, poverty incidence is mostly calculated on the nutrition-based poverty line.

9. A number of studies¹ have been undertaken to draw the poverty line in Pakistan. These studies are based on the Household Income and Expenditure surveys periodically conducted by the Federal Bureau of Statistics. On the basis of the Income Expenditure Survey of 1990-91 with a minimum nutrition of 2550 calories per day the poverty line for 1990-91 works out at Rs 280 per person per month². With this benchmark, the number of population below poverty line in 1990-91 comes to 21.9%.

10. Income distribution is used to estimate the patterns of income sharing of the different income groups of the society. In Pakistan, no effort was made to collect data on income

¹Irfan & Amjad 'Poverty in Rural Pakistan' in Khan and Lee(eds.) Poverty in Rural Asia, ILO. 1984

²Cost of minimum nutrition of 2550 calories per day for rural sector in 1979 was estimated at Rs.109 per capita per month. The figure of Rs.280 per person has been compiled by converting this into national level by using the rise in food price index upto the year 1990-91.

distribution until 1963-64 when the first Household Income and Expenditure Survey (HIES) was carried out. Despite limited size of the sample and other statistical biases, HIES are still a useful source of information. These surveys have led to certain basic conclusions about income distribution. On the basis of the Household Income and Expenditure Survey for 1990-91, the Gini ratio³ works out to 0.41. The lowest twenty percent household had 8% share in total income and the highest 20% household share 45% of the total income.

11. The Survey showed that rural population have lower standard of living compared to their urban counterpart. The monthly income of urban household is estimated at Rs 3701 (per capita Rs 546) and rural household Rs 2931 (per capita Rs 455). This is attributed to their poor possession of productive assets, high rate of under-employment and lack of socio-physical infrastructure. The average income for the sampled household in rural areas is less than that of the urban areas.

12. Income distribution has also been found skewed in both the rural and urban areas. On the whole income distribution picture is better in the rural areas compared to the urban areas. The share of the lowest 20% in the rural area is estimated at 6.5% while in the case of the highest 20%, it is 48% in rural area and 46.1% in urban area.

Policy and Strategy For Eighth Plan

13. The above analysis shows that incidence of poverty in Pakistan is high and policies and programmes are needed for reducing poverty and income disparity. Poverty is however a complex issue and needs a multifaced approach having a macro as well as micro dimension. The key elements of the policy and strategy are: (a) generation of economic growth and its equitable sharing with the poor (b) human resource development and provision of basic social services, and (c) special anti-poverty programmes for the most disadvantaged and needy groups. An important aspect is the active participation of poor themselves without which the results will remain limited.

14. Various studies have concluded that a relatively high income growth rate in Pakistan has been associated with a steady decline in poverty. Thus pursuance of the objective of high growth rate during the Eighth Plan period will also help reduce poverty. However, in order to have greater impact, the high economic growth objective will have to be supplemented by efforts to improve distribution of income. Growth points will have to be dispersed through appropriate policies and extension of infra-structure and productive services to areas and groups having limited access to these facilities. The incentives framework will be made attractive in terms of input and output prices supported by appropriate physical and economic infrastructure to enable the landless tenants, small farm holders, artisans and others to get equitable return for their toil.

³ Gini ratio is one of several but the most commonly used measure of income disparity because of convenience in computing and understanding. Its value ranges from 0 to 1. At zero it represents perfect equality (each percentile of household getting the same income) while at one it indicates perfect inequality (one income class has all the income and every one else has nothing).

Economic and social distortions and constraints which inhibit the poor to raise his output and contribute his savings for additional investment and growth will be removed. Productive assets will be generated by transferring surplus labour into capital.

15. Poor mostly live in rural areas and are dependent on agriculture. Development of agriculture with emphasis on food production to ensure food security and availability of desired caloric intake will receive priority. Labour intensive process of industrialization based on use of technology will be encouraged.

16. The reinforcing relationship between economic growth and human resources development warrants greater attention to the social sector. Pakistan faces a major challenge in the low level of social indicators like literacy, life expectancy, access to primary health facilities, potable water and sanitation. The Social Action Programme lays emphasis on primary education, basic health, population welfare, sanitation and potable water. It is targeted towards rural areas and women. Elaborate operational strategy and machinery has been devised and funds to meet development and recurring expenditure have been earmarked to ensure effective implementation of the programme.

17. It is common knowledge that many programmes of poverty alleviation and social development have not yielded the desired results due to non involvement of and lack of response from the people concerned. Till such time the poor are treated as actors in development and not just as object of welfare, and till such time these programmes are not based on their active participation at various stages the results will continue to be meager. Thus efforts will be made to initiate programmes through active involvement of the people concerned. Voluntary organizations with the collaboration of the people concerned will be a more effective mechanism for undertaking these programmes.

18. Thus the main ingredients of the strategy are:-

- a) Expanding the productive assets of the poor including both in respect of human capital and economic resources.
- b) Creating environment which motivates active participation of the poor in the growth process.
- c) Devising mechanisms for ensuring fair reward to the efforts of the poor in national production and income distribution.
- d) Initiation of schemes for targetted groups such as Zakat, Baitul Maal, Food Stamps and self employment.

Programmes

19. Following programmes, which will help in alleviating poverty will receive attention during the Eighth Plan.

(I) Delivery of Social Services

20. **Education:** Poverty is negatively correlated with education. Empirical research has shown that socio-economic return of investment, particularly on female education is high. Therefore education could be used as a strong catalyst in reducing poverty. In this context the main focus of the Eighth Plan will be on universalizing access to primary education for all boys and girls of age 5-9 years, enactment and enforcement of legislation for compulsory primary schooling for all children, removing gender and rural urban imbalances and qualitative improvements of physical infrastructure.

21. During the Eighth Plan enrolment at primary level will be raised from 12.4 to 17.9 million children and the participation rate raised from 68.9 per cent in (1992-93) to 87.7 per cent in 1997-98. (boys from 84.8 per cent to 95.5 per cent and girls 53.7 per cent to 81.6 per cent).

22. **Nutrition:** Nutritional deficiency or under-nourishment is a chief correlate of poverty. It corrodes the immunity of the poor to diseases and as a result affects his health, ultimately impairing his efficiency and productivity. Among the poor, the most affected are children and females particularly, pregnant and lactating women. Almost 90 per cent lactating and pregnant women are suffering from anaemic diseases. At sectoral level, the rural masses are greater sufferers compared to the urbanites. The primary reason of nutritional deficiency is lack of adequate food intake and balanced mix of nutritional contents. Iodine, iron and vitamin deficiencies are severely affecting a sizable segment of population. Vitamin A deficiency is prevalent in slum agglomerations which plays a major role in high infant mortality and infections. The degree of nutritional deficiency is a reflection of the inequality in income distribution.

23. During the Eighth Plan, nutritional status will be improved by integrating nutrition in primary health care system, school feeding programme, and intervention for diseases of nutritional origin. The crucial issues addressed will be the control of infectious diseases, mass awareness regarding nutritional practices, removal of iron deficiency, anaemia and iodine deficiency. Nutrition in primary health care system will be provided to 5000 primary health care centers. 2.87 million girls students will be covered under school feeding programme. Distribution of iron sulphate through primary health care network coupled with proper nutrition education will be launched to control anaemia in 50 million peoples.

24. **Health:** There has been a steady improvement in the health facilities over the last few years. Yet, the demographic situation is characterised by a high birth rate, a low death rate and high infant and maternal mortality rate. Diarrhoea and pneumonia in children and complication of pregnancy in women of child bearing age are quite wide spread and are the major killers. About 15-20 million people are at risk for the full spectrum of iodine deficiency disorders.

25. During the Eighth Plan, efforts will be made to improve the quality of services/cases by creating a balance of promotive, preventive and curative care and removal of inequalities in the health sector. Public sector health care will be decentralized and it will be spread to the deprived villages. The areas of maternal and child health services will continue to remain at the

top of the agenda for health services. A programme of community health workers (CHW) will be introduced. The CHW's will be properly trained and equipped with basic knowledge of health care. These units will act as a bridge between the community and the health units. During the Eighth Plan, 3874 BHU's, 492 RHC's upgradation, 616 UHC's, 21500 hospital beds, 17300 doctor, 18000 nurses, 48,500 paramedics will be provided. Besides 22.8 million children will be immunized and 92.87 million packets of O.R.S. will be provided.

26. Population Planning: High population growth among the poor is a bottleneck in the poverty alleviation. Past programmes suffered due to inadequate coverage of population and poor performance in the field, in particular, in the rural setting. The focus of the population welfare programme in the Eighth Plan will be on expanding the coverage from 20 per cent to over 80 per cent of the population and improving the implementation of the programme. The present urban coverage of 54 per cent will be increased to 100 per cent and rural from 5 per cent to over 70 per cent. It is intended to extend the programme to cover the entire population by the year 2000. Separate strategies are being proposed for the urban and rural areas. The number of family welfare centres in the urban areas will be increased from 690 to 900 and these will be established in the Katchi Abadis, slum areas and low income concentration localities. Involvement of NGOs in the programme will be encouraged particularly in the urban slums, Katchi abadis and labour colonies.

27. An innovative strategy being adopted in the rural areas is to introduce a community-based lady motivator-cum-service provider in villages with a population of 2000 and above. In every village one suitable indigenous educated married woman over 25 years of age will be selected and engaged on contract basis after proper training.

(II) Physical Infrastructure

28. Housing: The current housing situation in Pakistan is far from satisfactory. About 25 percent of the urban population and majority of the rural population live in poor living conditions. In large cities like Karachi and Lahore around 40 percent people are forced to live in the slums and katchi abadis.

29. During the Eighth Plan 500,000 plot of 7 marla will be developed in the rural areas and about one million housing units will be provided alongwith facilities for construction. The entire financing will be generated through household savings and credit facilities from financial institutions.

30. Sanitation and Drainage: During the Eighth Plan 80 per cent of the urban population will be provided sewerage facilities (i.e. 90 per cent for metropolitan and 60 per cent for other cities). The basic services like sanitation have been integrated in the Social Action Programme (SAP). By the end of the plan period sanitation facilities will be extended to 75 per cent of the population by serving 20 million additional population. The programmes will be decentralised by involving local councils and district development committees.

31. Potable water supply is an important component of the Social Action Programme. It is planned to cover 95 per cent of the urban population for potable water supply (i.e. 100 per cent

for metropolitan and 85 per cent for other cities). Similarly 61 per cent of the rural population will have access to clean drinking water. By the end of the Plan period 80 per cent of the population will be covered under potable water supply schemes.

32. *Electricity*: Electricity is one of the most important element of any productive activity. A programme of village electrification is being implemented. During Eighth Plan period 19700 villages/abadis will be electrified which will raise the number of villages/abadis electrified to 54871.

33. *Transport and Communication*: Construction of farm-to-market roads is an integral part of the rural development effort. These roads open new vistas of trade and prosperity in the rural areas. During the Seventh Plan, 6500 Km. of rural road were constructed and during Eighth Plan additional 10,000 Km. of rural roads will be added.

(III) Access to Financial Credit

34. The small scale sector has emerged as a dynamic sector of the economy. In the industrial sphere most of the impulses of growth and labour absorptive capacity emanate from this sector. Similarly productivity is higher on the small farms than in large farms. Growth of this sector, however, is being constrained by the non availability of financial resources from the credit institutions. Financial institutions will provide credit to small entrepreneurs without stringent collateral requirements. Cooperative societies and self help schemes will be encouraged. These will meet the credit, input and marketing needs of the small farmers. Credit will also be provided to small entrepreneurs who intend to develop technology suited to carry out agricultural operation on small farms. Specialised financial institution will be promoted to meet the financial needs of small farmers and entrepreneurs. This would generate substantial employment.

(IV) Access to Technology

35. Rural access to technology would be improved through extension services and training programmes. Vocational training institution are being set up in rural areas for providing training in various trades and skills. Private sector and NGO will also be encouraged disseminate technology in the rural areas.

(V) Employment and Manpower Development

36. The employment policy will focus on investment in promotion and growth of labour intensive activities like small scale industry, social sectors and rural development programme. Moreover, there will be emphasis on provision of credit and other facilities for promoting self-employment, encouraging overseas migration and expansion of technical training facilities.

(VI) Food Pricing & Distribution Policies

37. The economic policies will aim at growth with low inflation. Provision of essential food items at reasonable prices is an important component of poverty alleviation programme of the Eighth Plan. Efforts, therefore, will be made to keep the price of food items at reasonable level

especially of those which constitute wages earner's and poor man's food basket. This will be done by increasing the availability of food items by augmenting domestic production and of liberal imports when supply constraints emerge. To ensure availability of food and other products an effective distribution system will be set in place. Marketing bottlenecks in the delivery of food items to poor and far flung areas will be removed. The number of utility stores will be increased.

(VII) Special Programme for Target Groups

38. Besides the general programmes and policies aimed at alleviating poverty, specific programmes will be launched during the Eighth Plan to benefit the target groups.

- a) **Women:** Women are one of the main targets of the Social Action Programme and other plans relating to education, health, nutrition, training and employment. In addition, other programmes including day-care residential accommodation and industrial homes for orphan girls will be strengthened. The thrust is on improving the conditions of the poor and needy women. NGOs and women associations will be encouraged to participate in income generation projects. A network of the community centres in rural and urban areas has been planned for organising women on self-help basis. A scheme will be developed to provide legal aid to women for protecting their legitimate rights. Similarly the network of Darul-Aman will be expanded to provide shelter and protection will to the needy women.

Female education institutions will be integrated with the vocational and technical training. Cooperatives will be encouraged for self-employment of women in rural and urban areas. Women Division will arrange financing and loans through financial institutions for various programmes for women development. Mass Media will also be fully involved to bring about the needed social change for greater participation of women in economic activities. Government policies will permit re-training and re-hiring of women who have left the labour force.

- b) **Safety Nets:** Zakat and Usher funds are already being used for the assistance of indigent and needy sections of the population. Their distribution system will be improved and its emphasis will be shifted from temporary relief to permanent rehabilitation of the Mustahqeen. Bait-ul-Maal will be further expanded. This will be coordinated with the Zakat and Usher system to ensure their full impact on poverty alleviation.

- c) **Social Welfare Programme:** During the Eighth plan, reorganization of the social welfare programme will be undertaken. Umbrella organisations or central coordinating body will be created for efficient use of various units both in the public and private sector. Existing social welfare and local government institutions will be strengthened, their functional capacity and scope of work will be expanded. Public sector social welfare programmes will be decentralized at

district, tehsil and union council level. Social legislation will also be reviewed to promote maximum use of different welfare agencies and NGOs. Private sector will be encouraged to play a greater role in the field of social welfare.

- d) Special education and rehabilitation services for the disabled will be further strengthened. Training facilities for special education teachers and skilled rehabilitation workers will be expanded. The ongoing projects of National Institute of Special Education (NISE), National Institute of Handicapped, sequence of Training Programme in Allama Iqbal Open University, Punjab and Karachi Universities will be strengthened and developed.
- e) **Children:** Children under 18 years of age comprise nearly 53 percent of total population. Not only because of their numbers, but also in view of their intrinsic value in human resource development, the 8th Plan will accord high priority to programmes aimed at ensuring survival, protection & development of children. Adequate allocations will be made to implement provisions of the Convention on the Rights of the Child (CRC). Existing legislation for children will be reviewed in the light of the C.R.C.

II-3

CRITICAL ISSUES

b- SELF RELIANCE

A higher degree of self reliance is a desirable long term goal. It should, however, be recognized that economic and social progress is possible only through greater interdependence among nations and that specialization promotes overall productivity. Self reliance should therefore not mean autarky. Nor is it a measure of local availability of physical goods and services. It should be conceived in terms of the build up of internal sources of strength and growth in the economy. This would be reflected in (i) improved saving investment ratio (ii) sustainable levels of domestic and foreign debt and (iii) avoidance of persistent or large deficits in the external accounts.

2. Self reliance is thus a measure of capacity of the nation to make free and voluntary choices in the disposition of its resources and output and in the delineation of its priorities.

3. The process of development in the past has been accompanied with large internal and external imbalances. In the Seventh Plan it was envisaged that dependance on external resources would be reduced from 21.4 percent of investment during the Sixth Plan to 13.4 percent. In fact the opposite has happened and the share of external resources in total investment increased to 25 percent. The balance of payments situation also deteriorated. The current account deficit rose from \$1682 million in 1987-88 to \$ 3688 million in 1992-93 and the stock of external debt from \$ 12.9 billion to \$ 19 billion. Similarly, the overall fiscal deficit (Which was planned to be reduced from 8.5 percent of GDP in 1987-88 to 3.8 percent in 1992-93) remained over 7% of GDP during the terminal year of the Seventh Plan.

4. An important indicator of self-reliance is the resilience of the economy i.e. its capacity to absorb the internal and external shocks. The degree of resilience in the economy of the country is weak. Output, external trade and taxes are dependent on a few products which has made the economy vulnerable. Floods, rains and droughts have often jeopardized the growth rate, affected the balance of payments, budget, national income and prices. Failure of major crops like wheat and cotton and decline in key exports have had wide effects. It is therefore essential that the economic structure develops better safety margins through product diversification and through generation of surpluses in line with its competitive advantage.

5. The third important aspect relates to the intellectual and technological capacity. This would require upgradation of education standards and skills and expanding, deepening and diversifying the human resource base. People will be required not only to acquire knowledge of science and new technologies but also that of modern management techniques. A new knowledge seeking culture will have to be imbibed so that our people are capable of finding their own solutions to the emergent problems.

6. Self-reliance in growth requires absorption of technology and the ability to adopt, and modify the technologies that are available. The technological base in Pakistan is narrow. The number of scientists, engineers, technicians and subject specialists is small. The standard of education in science and other fields has deteriorated. Transfer of technology is sketchy and superficial. The capacity to master technology is rudimentary. This must be improved by qualitative enrichment in the institutions of learning and a performance based reward system.

7. Security in key areas like food and energy is also desirable as a part of self reliant growth. But this security must be built upon the inherent production potential in the economy and must not conflict with the need for specialization. As Pakistan has a good infrastructure for agriculture and energy larger availability of these goods is consistent with our comparative advantage.

8. The key areas are discussed below:-

Savings and Investment

9. During the Seventh Plan dependence on external resources has increased from 21.4 per cent of investment in the Sixth Plan to 25 percent. In the Eighth Plan an attempt will be made to reverse the situation and by the terminal year of the Eighth Plan (1997-98), the share of external resources in the total investment is planned to be brought down to 14 percent of total investment or 3% of GDP (Table-3.1).

Table-3.1

National and External Savings and Investment
At 1992-93 Billion Rupees

	<u>Seventh Plan</u>		<u>Eighth Plan</u>	
	<u>(1988-93)</u>	<u>% of GDP</u>	<u>(1993- 98)</u>	<u>% of GDP</u>
Total Investment	1237.9	20.1	1826.6	21.1
Financed by:-				
(National Savings)	916.5	14.9	1570.2	18.1
(External Saving)	321.4	5.2	256.5	3.0

10. The high growth envisaged in the Eighth Plan will generate additional domestic savings. The package of the economic reforms and measures taken to de-regulate and liberalize the economy and the proposed macro-economic stability will help in encouraging the investment activities. Other factors that would facilitate domestic savings and investment are improved general economic conditions, maintenance of law and order and political stability, physical and social infrastructure, market friendly policies and institutional environment.

External Balance

11. The rising gap between domestic savings and investment is also reflected in the balance of payments situation. During the 7th Plan the envisaged improvement in the external sector could not be realized. While on average exports increased by 9.4 percent, imports by 7.8 percent. Remittances dropped by 4.5 percent. Consequently the balance of payment deteriorated and the deficit in current account rose from \$ 1682 million in 1987-88 to \$ 3688 million in 1992-93. The stock of external debt rose from \$ 12913 million to \$ 19044 million during the same period.

12. In the Eighth Plan efforts will be made to reverse the trend. Fiscal, monetary, trade and other policies and measures will be adopted to ensure higher growth in exports and foreign exchange earnings and relative slow growth in imports and payments. Though home remittances may not register substantial growth due to allowing foreign currency accounts, these will remain one of the main sources of foreign exchange earnings.

13. Attaining external self-reliance also lies in securing a gradual decline in the external debt service ratio over the long-term. This would be a challenging task as significant changes in the cost and term structure of foreign borrowing are likely to occur in the years to come. Non-concessional flows will account for a greater proportion of official borrowing, and direct borrowing by financial institutions and the private sector would grow fast. Containing debt service payments to a manageable level will thus require sustained and well-directed efforts, along with a supportive incentive framework, to maximize foreign exchange earnings. Efforts will have to be made to encourage direct foreign private investment as a replacement for foreign loans. It is proposed to bring down the current account deficit from the benchmark level of over 4.4 percent of GDP in 1992-93 to 2.1 percent of GDP in 1997-98.

Budget

14. The Seventh Plan was considered as a first step towards achieving self reliance in the budget by envisaging reduction of overall budgetary deficit from 8.5 percent of GDP in 1987-88 to 3.8 percent in 1992-93. The performance, however, is not in accordance with the target and overall budgetary deficit in 1992-93 remained over 7.0 percent of GDP. The goal of turning the revenue deficit into surplus also did not materialize. This situation was due mainly to partial and also late implementation of resource mobilization and expenditure control measures suggested in the Plan. The fiscal policies were conducted independent of the consideration of fiscal discipline laid down in the Seventh Plan. The development programmes of most of the Corporations continued to be financed through budget for three to four years as opposed to the Plan recommendations. Similarly the suggested users charges for health, education, irrigation and road services could not be imposed.

15. The Eighth Plan aims at ensuring greater financial discipline and reduction in the overall fiscal deficit from over 7.0 percent to 4.0 percent of GDP by the terminal year of 1997-98. The projected overall fiscal position is shown in Table-3.2.

Table-3.2

Public Finance

	1992-93	1997-98
<u>As a percent of GDP</u>		
i) Expenditure	24.2	25.9
(a) Current	19.2	19.8
(b) Development	5.0	6.1
ii) Revenue	17.4	21.7
iii) Fiscal Deficit	6.8	4.2

16. For the attainment of above targets, revenue augmenting measures would focus on reforming the tax structure of the country. Efforts would be made to reduce tax evasion and enlarge the base of direct taxes by eliminating exemptions and making suitable adjustments in the tax rate structure. Similarly, the scope of wealth and capital value tax would be extended to cover other sources of wealth and property. On the expenditure side, measures would involve containment of Government expenditure on general administration, debt servicing and defence.

Food

17. The natural endowment of the country is capable of ensuring self sufficiency and even surpluses in many food items. The output of foodgrains in Pakistan has been rising steadily (Table-3.3). Pakistan exports over one-third of its rice production as well as significant quantities of fruits, vegetables and other processed and semi-process food. However, edible oils, wheat, sugar, milk and some pulses are being imported as and when required to cover up the gap between consumption and production.

Table-3.3

Production of Foodgrain/Oil Seed

(000 MT)

	1987-88	1992-93 Benchmark	1997-98 Targets
Grains	17471	20059	24382
Wheat	12672	15000	18250
Rice:	<u>3241</u>	<u>3250</u>	<u>3902</u>
Basmati	943	1150	1468
Others	2298	2100	2434
Maize	1127	1210	1472
Other Cereals	428	599	758
Edible Oils	415	520	750

18. On the basis of projected increases in production, exports and imports, the per capita availability of major food items over the Eighth Plan period is estimated in Table-3.4.

Table-3.4

Per Capita Availability of Food*

(kg/per year)

	1992-93	1997-98
Wheat	119.9	120.0
Rice	14.1	15.7
Maize	6.9	7.3
Pulses	4.8	5.2
Other grains	4.2	4.6
Fruits	34.3	39.1
Vegetables	37.4	39.3
Sugar (refined)	20.5	20.9
Edible oils	12.3	12.0
Milk	63.0	69.8
Meat	14.8	17.9
Eggs (Nos.)	38.0	40.0

* For nutrition purpose and not the total availability.

19. Considering the existing level of consumption and projected increases in population, per capita income and income elasticities of recent past, the per capita availabilities estimated above should raise the daily diet of an average Pakistani close to the recommended level of 2500.

Energy

20. The projected requirements of commercial energy supply is expected to increase from 34.4 million TOEs in 1992-93 to 47.7 million TOEs by year 1997-98. Accordingly, per capita availability of commercial energy supply would increase from 0.282 to 0.342 TOEs. Increased energy requirements would be met by enhancing the production of natural gas, coal, and hydel electricity to the maximum extent possible. Future supply projections are based on modest assumptions regarding discoveries of future oil and gas resources as per the current statistical trends. However, if some large resources are discovered, the oil import scenario can be drastically changed.

21. Towards increasing the exploration of oil and gas, it is projected to increase the number of wells drilled per year from 47 in 1992-93 to 70 in 1997-98. The share of Hydel electricity in the total commercial energy supply will be about 11 percent in 1997-98. Due to the larger gestation period of Hydel plants, the increased share of Hydel electricity will be apparent in the Ninth Plan.

22. Recently, major deposits of coal have been identified at Thar. Efforts would be made to confirm these resources and develop them for large scale power generation.

23. The Government has laid heavy emphasis on the development of natural gas. Since a large part of the country is considered to be gas prone area, therefore, it is proposed to improve the terms of concessions for discoveries of gas. The price of gas will be indexed to the C&F price of a basket of imported Arabian/Persian/Gulf crude oil as follows:-

Zone 1	77.5%
Zone 2	72.5%
Zone 3	67.5%

The development of the known resources of gas would also be accelerated.

24. A modest beginning is also being made by constructing a 300 MW Nuclear Power Station at Chashma. The nuclear power may also play a useful role in increasing the self reliance of the country.

25. On the demand side the present and projected growth rate in various sectors of primary commercial energy are given in Table-3.5.

Table-3.5

**Growth rates of
Various Primary Commercial Energy Sectors**

Sectors	1992-93 (ACGR %)	8th Plan end 1997-98 (ACGR %)
Power	7.9	7.1
Oil	6.1	10.0
Gas	6.3	9.4
Coal	5.7	10.3

26. A programme for demand management, efficiency improvement and rational use of energy has been initiated and it is hoped that by implementing this programme, losses would be reduced and the growth in demand would be reduced without affecting the future development.

27. In respect of non-commercial energy (traditional energy), a detailed household energy consumption policy would be adopted to reduce the cutting of wood resources, efficient use of biomass etc. and increasing plantation to meet the demand.

Technology

28. Technology is the basis of modern development. In Pakistan, investment in the development of technology is marginal. To accelerate the pace of technological development, the allocation of resources for the development of technology including research and development will have to be increased with priority given to such technologies which yield the largest linkage effects. Moreover the private sector will be encouraged to undertake research and development. The research institutions will be strengthened and the transfer of technology will be encouraged. For this purpose, fiscal and other policies will be adopted. Efforts will be made to upgrade the standard of education and training in science and technology. Indigenous technology will also be promoted.

Self Reliance Indices

29. An objective of development policies is to attain greater self-sufficiency in the production of items of basic needs, energy, capital goods and mobilization of resources. The projected indices of self-reliance over the Plan period are given in Table-3.6.

Table-3.6
Self-Reliance Indices*

	1992-93	1997-98
Grain	96.8	107.2
Wheat	87.5	100.0
Rice	175.8	174.2
Maize	100.0	100.0
Other Cereals	100.0	100.0
Edible Oil	31.7	39.2
Sugar	100.0	100.0
Fertilizer (N)	53.0	60.0
Commercial Energy	68.5	71.4
P.O.L.	22.2	18.6
Savings/Investment	78.8	90.0
Capital Goods**	10.0	12.0

* These indices are calculated as a ratio of domestic production to total demand and expressed as a percentage.

** Machinery and equipment.

II-3

CRITICAL ISSUES

C- EMPLOYMENT

Introduction

The country suffers from low labour force participation as well as low employment status. This situation is primarily on account of high rate of population growth, low level of savings and investment, mis-match in demand for labour and supply of labour, declining labour absorptive capacity in agriculture and large scale manufacturing and labour displacement due to rural urban migration. The reduction in open and disguised unemployment is one of the major objectives of Eighth Plan.

Policies and Strategy of Eighth Plan

2. The backlog of unemployment at the beginning of Eighth Plan is estimated at 1.93 million. In addition, the net increase in labour force (on the basis of 1990-91 LFS participation rate) is estimated at 5.45 million. For the attainment of full employment, the Eighth Plan needs to create about 7 million jobs. The solution of the problem of unemployment has to be found through a high rate of overall economic growth and through encouraging the use of labour intensive production technology. To supplement the opportunities created by the normal growth process, direct employment generation programmes, already initiated in the recent past will have to be continued and avenues for overseas employment will have to be explored.

3. Employment promotion strategy of the Eighth Plan will involve measures to:-

- (i) attain a high economic growth rate;
- (ii) reduce the population growth rate;
- (iii) encourage labour intensive technologies;
- (iv) expand facilities for technical education and vocational training;
- (v) ensure credit for self-employment;
- (vi) encourage manpower export;
- (vii) Expand social services (like primary education, basic health, nutrition and sanitation) particularly in rural areas;
- (viii) Initiate and encourage programmes of skill training and employment of women; and
- (ix) initiate special employment generating programmes for handicapped and special groups;

4. These elements have been discussed in detail in various sections of the Plan.

Employment Potential

5. The employment potential of the Eighth Plan has been assessed on the basis of historical relationship of employment to output in each sector. This method is susceptible to a wide margin of error on account of many factors including technological changes, weather conditions, and changes in the cost structure of production. Therefore, approach has been used cautiously. The historical relationship, where possible, has been adjusted keeping in view the production structure, investment priorities and growth strategies envisaged for each sector during the Eighth Plan.

6. It is estimated that for attaining the full employment, 7.38 million jobs will be needed during the Eighth Plan. With a GDP growth of 7 percent a year, 5.72 million new jobs are likely to be generated internally. In addition net overseas migration of the order 0.5 million is also expected, thus leaving the number of unemployed towards the end of the Plan as 1.16 million (or 3 percent unemployed rate as compared with the unemployment rate of 5.3% in 1991-92).

7. The agriculture sector being the main employer of work force, is expected to generate about 1.88 million or 32.9 percent of the additional employment opportunities. The share of agriculture in total employment will however, come down from 47.2% in 1991-92 to 45.7% in 1997-98. In the agriculture sector the productivity of labour and efficiency of inputs has been increasing gradually and is expected to improve further in the wake of improved irrigation practices, productivity enhancement programmes and intensive cultivation envisaged in the Plan. Growth generates jobs while improvement in technology and labour productivity reduces the same. The additional employment opportunities in the agriculture, therefore, will have to be generated through irrigating additional one million hectares of cropped area, shifting the cropping pattern in favour of high value labour intensive crops, development of non-crop activities such as horticulture, dairy farming, fisheries and afforestation and diversification of rural economic activities through establishment of processing, grading, packing and cold storage facilities.

8. The production and investment strategies and programmes envisaged for the development of manufacturing sector, are expected to provide 0.63 million additional jobs, including 0.55 million in the small sector. In view of the increasing trend towards more capital intensive industrial production and increases in productivity, the direct employment potential of large-scale manufacturing sector is rather limited. It is only the small-scale, ancillary and services sectors which offer good prospects for additional employment. Greater emphasis will have to be placed on small and cottage industries which also need lesser investment per job (i.e. about Rs 150 thousands per job against about Rs 3.5 million required for creating one job in large scale manufacturing). Steps in this direction will include (a) expansion of infrastructural facilities; (b) deregulation and liberalisation of the economy; (c) fiscal and financial incentives and concessions and (d) promotional programmes such as skill development, small industrial estates, common facilities and marketing arrangements.

9. The energy generation, is capital intensive, but employment generation in distribution is high. The additional employment targets in this sector are premised on village electrification, additional urban consumers and supply of gas to various towns.

10. The prospects of additional employment opportunities in railways, air service, and shipping are limited. Additional employment in transport and communication sector will be generated via expansion of postal, telecommunications and travel services and induced road traffic in the wake of completion of highways projects. About 0.25 million additional jobs are expected to be created in the Transport Sector.

11. The Construction Sector is expected to generate 0.87 million additional jobs or 15.2 percent of the Plan target. Besides the construction activities associated with the development of physical and social infrastructures in the public sector, the development of new residential and commercial centres and small town by the private sector will be relied upon to utilize the high employment potential of this sector.

12. In the services sector, the bulk of employment opportunities will be created in the health, education and rural development through the implementation of Social Action Programme. The Programme will be implemented by provincial governments through involvement of communities and the private sector. The Government grants to private sector will be channelled through Health and Education Foundations. More flexible rules for recruitment and other incentives to attract suitable staff, particularly females for rural areas, will be framed. About one million additional jobs are likely to be created under this programme.

13. The structure of employment emerging from the above projections is shown in Table-3.7

Table-3.7

Gross Employment Projections
(Million Nos.)

	1991-92	1992-93	1997-98	Annual Growth Rate
Population	113.99	120.92	139.02	2.83
Labour Force	31.88	33.82	39.27	3.03
<u>Employed</u>	<u>30.51</u>	<u>31.22</u>	<u>36.94</u>	<u>3.42</u>
Agriculture	14.40	14.65	16.53	2.44
Manufacturing	3.74	3.79	4.42	3.12
Construction	2.06	2.16	3.03	7.00
Trade	4.08	4.22	5.17	4.14
Transport & Communication	1.61	1.66	1.91	2.85
Others	4.62	4.74	5.88	4.40
Unemployed	1.37	2.60	2.33	(-) 2.17

14. Efforts will be made to promote overseas employment during the Eighth Plan. For this purpose, training and skill certification arrangements will be made by the National Training Board for Pakistani labour in demand abroad. Foreign missions will be strengthened for promotional work for manpower export by giving them more qualified staff and other resources. Bilateral agreements will be initiated to promote and diversify the direction of overseas migration. These efforts are expected to achieve a minimum net overseas migration of about 0.5 million over the Plan period.

15. The likely employment generation, after net overseas migration, during the Eighth Plan is summarized in Table-3.8.

Table-3.8

Employment Generation during Eighth Plan

	(Million)
Unemployment backlog at the beginning of the Plan	1.93
Increase in labour force	5.45
Number of people seeking jobs during 8th Plan	7.38
Additional Employment generated by planned growth	5.72
Net overseas migration	0.50
Number of jobs to be created during the 8th Plan	6.22
Unemployment by the end of 8th Plan	1.16
Unemployment Rate by the end of 8th Plan	3.0

16. The unemployed with matric and above qualification constituted about 18.8 percent of total unemployment in 1990-91. Within this group 18.9 percent were graduates and post graduates and the rest possessed matric and intermediate qualification. According to some studies the gap between demand and supply of educated labour force is in the range of 25-35 percent with major imbalances concentrated in the demand and supply of matriculates and intermediates. Non-availability of data on demand supply for subsequent year inhibits making sound projections at a dis-aggregated level, particularly by level of education. However, attempts* on the basis of various assumptions reveal that unemployment rates for the educated youth may increase sharply during the Eighth Plan period. Compared to the growth of 3.03% a year in total labour force, the growth of labour force with education at matric level will be about 4.6% and that of above matric level will be 7.2%. On the other hand, employment of the educated is not likely to grow at a rate faster than the growth of aggregate employment. As a result, about a quarter of the educated youth may not be able to find jobs compatible with their qualifications or skills requirement.

Promotion of Employment

17. Isolated measures to seek solution to an unemployment problem in the past have proved ineffective and thus call for a well integrated measures at all fronts. Of the main problem the educated unemployment, is amenable to policy formulation. Some of the specific measures contemplated to help solve the problem of educated unemployment are the promotion of self-employment opportunities through arranging technical and vocational training programmes encouraging the graduates and post graduates to go for higher studies in the field of science and technology through stipends and the rest to establish their own business with the financial help in the form of a Qarze-Hasna. In order to enable the graduates to find work easily, the education curricula at middle and high schools levels will be reoriented to have a greater focus on vocational, commercial, business and agro-related subjects.

18. For the promotion of employment opportunities in the informal sector a trade and location specific credit policy linked with intensive training promotion of home-based women activities and the establishment of trade-specific organisation will be encouraged. In addition number of barani area development agencies fully integrated with the line departments will be set up in order to exploit the employment potential of barani areas.

Overseas Employment

19. Given the decline in the absorptive capacity of major sectors of the domestic economy, the employment abroad continues to be one of the major avenues for absorption of fast growing labour force since early seventies. The overseas migration peaked in 1981 when 168,403 workers went abroad. By 1986, the out-migration had declined to 62,568. The decline in out migration was accompanied by substantial return migration. Since 1990, the out migration is

* See Tejani K. and Malik F.A., Manpower simulations: Assessing Scenarios for Pakistan's Eighth Five Year Plan, 1993-98, Pakistan/Netherlands Project on Human Resources, Islamabad, November 1991.

increasing again; respective estimates for 1990 and 1991 are 115,520 and 135,000 workers. Similarly, the return migration has also declined and the stock of workers abroad is rising again.

20. In the last 3 to 5 years, rising overseas demand has been witnessed in many occupations. This includes demand for construction related occupations, including masons, carpenters, electricians, plumbers, steel fixers, painters, etc. which is in sharp contrast with the commonly held view that the demand for construction related skills has declined in the Middle East. Other categories of skills in rising demand are production worker including drivers, technicians, centers and mechanics. The demand has also gone up appreciably for service occupations including tailors, waiters and cooks and for professionals including engineers, doctors, teachers, accountants and managers. The occupations where the demand has stagnated or has actually declined include stenographers, agriculturists, supervisors, cable joiners, operators, surveyors and fitters. While the construction related skills still remain in demand, there is an increasing requirement for service and maintenance related occupations.

21. The job market abroad is highly volatile and there is need for policy vigilance to maintain this lucrative source of employment. In order to promote export of Pakistani manpower during the Eighth Plan, the following will constitute the main elements of Pakistan's overseas employment strategy:-

- i) The training programmes in Pakistan will be made sensitive to the changing requirements of skills in the Middle East countries. The emphasis of training will be on the nature of skills, the quality of training and familiarity with the machinery and equipment used and work methods employed in the Middle East.
- ii) A credible system of skill certification will be developed for quick selection of workers. Top priority will be given by the National Training Bureau to develop skill standards for occupations in demand overseas and to establish the skill certification system with the help of Provincial Training Boards.
- iii) The procedure regarding recruitment of manpower for the private sector is generally satisfactory. However, the procedure for recruitment for the public sector is time consuming. The recruitment rules for hiring from among public servants would be simplified.
- iv) A centralized system will be established where information on various aspects of overseas migration is collected and disseminated according to requirements of users and regularly updated.
- v) Government will negotiate bilateral agreements with labour importing countries, including those outside the Middle East region, for supply of manpower.
- vi) Efforts will be made to explore prospects of exporting Pakistani labour to developed countries and far eastern countries.

Technical/Vocational Skill Development

22. Little emphasis has been given to technical training; 40% of matric pass-outs follow arts subject, 30% follow science subject and only 15% pursue vocational and technical training. The result is growing unemployment and mismatch in demand and supply of labour.

23. The Eight Plan aims at skill upgradation of country's labour force to meet the emerging new skill requirements.

24. For making the skills development programmes effective and reflective of the labour market requirements, the involvement of the private sector at all level will be given foremost consideration. The public sector will perform the support functions only in the form of provision of incentives curricula development, testing and certification mechanisms. The incentives may include soft loans, matching grants, and duty free import of training equipments. Besides, tripartite consultations will be made more effective by greater involvement of employers in training at policy and operational levels.

25. The training system will be made more efficient. Efforts may include imparting of training in skills in more demand, development of a modular system of training, activation of employment exchanges and their linkages with training institutions, greater autonomy for training institutions to enable them adjust their programmes with the local job market.

26. About 395 Post Secondary Colleges and institutions having a total intake of 44,000 are providing technical, commercial and vocational educations and training. By the end of the Eighth Plan their numbers is expected to rise to over 585 with an intake capacity of 65,000 (Table-3.9).

Table-3.9

Post Secondary Technical/vocational training

Type	<u>Present position</u>		<u>End of Eighth Plan</u>	
	No	intake	No	intake
Poly Technic/College (Including Private)	60	12,000	90	20,000
Commercial College/ Institution	145	12,000	195	15,000
Vocational Training Institute	<u>200</u>	<u>20,000</u>	<u>300</u>	<u>30,000</u>
Total	395	44,000	485	65,000

27. The programmes of training during the Eighth Plan will relate to the following five main areas.

a) Institutional Training in the Public Sector

28. In line with overall policy of development, the public sector institutions will perform only the support functions. The existing public sector training will be restructured to meet the demands of the labour market for which sufficient degree of flexibility and autonomy needs to be built into these programmes. This will include development of training modules of smaller duration with a possibility of combining different training elements to meet individual requirements.

29. Main training programmes consisting of Basic (G-III), Intermediate (G-II) and Skilled (G-I) level courses will continue. New Technical Training Centres in the public sector will be opened in close liaison with employment exchanges. Selected institutions will also be permitted to establish special funds to establish repair/production workshops and be allowed to do repair/contract/consultancy works. The funds so earned may be used for meeting their additional requirements of material and maintenance, and for financial incentives to trainers/trainees. National and Provincial Training Boards will ensure greater participation of employers in skill need assessments, curricula development, advisory committees, testing and certification. At policy level, participation by Technical Education Board, Planning and Development Departments, Education Department, Finance Department, Social Welfare Department and Industries Department in the Provincial Technical Boards will be made mandatory.

b) Apprenticeship Training

30. Apprenticeship scheme has not been very effective because of evasion, exemptions and poor enforcement. One of the major hurdles has been the definition of workers which includes apprentices. The scheme needs to be reviewed with a view to make it more effective for generation of the needed skills through the scheme on voluntary basis. Maximum participation of employers and trade associations will be encouraged in these reviews and in drawing up of new legislative instruments.

31. The incentives for promotion of the scheme may include skill competitions, awards, publicity, reimbursement of the cost of training to employers through matching grants for training equipment, softer loans and income tax rebates for money spent on training, and refund of 75% salary of the full time Training Officer employed by industries. The cost of these incentives may be met through the funds collected under Iqra and education cess.

c) Informal Sector

32. The Eighth Plan places heavy reliance on the informal sector for employment generation. Small sized workshops continue to possess a lot of potential for providing job oriented training. The Plan will promote skill development through small workshops with a view to promoting employment, skill up-gradation and diffusion of latest technology. Small workshops may be helped by providing them soft loans, import duty exemptions, free tool kits, measuring

instruments and simple machines, and reimbursement of half of the cost of apprentices. Trainees in small shops will be encouraged to learn related instructions and pass trade tests for purposes of recognition.

33. The Plan will provide for a more flexible approach for diffusion of new technologies for small enterprises, artisans and the self-employed. Vocational training programmes managed by NTB/PTBs will provide improved access to informal sector by less stringent criteria for entry in terms of educational requirements and age, by changing curricula to meet the needs of employers and trainees by even providing mobile training facilities at the door steps of small enterprises when their apprentices cannot attend the regular institutes. To break the communication gap between business community and governmental agencies, diffusion of technology and training may be taken up by eliciting support of business associations.

34. The institution of ustad-shagird will be expressly recognized and the establishments willing to participate in the scheme will be registered and arrangement for training, testing and certification will be made for their trainees by PTBs/NTB.

d) Private Sector Training Institutions

35. A number of technical training centres are being run by private parties and NGOs. Such institutions will be encouraged, provided they follow curricula, testing, certification and other conditions prescribed by PTBs/NTB. Facilities of PTBs training institution and instructor training may be made available to them for practical training on charge basis. Private sector institutions may also be given incentives like soft loans, duty free import of training equipment and machines, and income tax holiday for five years.

e) Training for Women

36. It is now widely accepted that women make a very important contribution to the economy through their participation in agriculture, manufacturing and services sectors. Women lag behind men in employment and to enable them to catch up, special efforts are being made to improve their education, skills and employability. This includes creation of education and training facilities for women and special quota for women in public sector jobs particularly in professions more suited for women like teaching, nursing, etc.

37. The specific sectoral programs and measures to promote female employment are as follow:-

i) *Health and Education*: Education policy will provide a good blend of quantity and quality in all levels of female education with inputs from women. Non-availability of female teachers in the rural areas is the main cause of low accessibility of women to education facilities at the grass-roots level. Most of girls schools are without any science teachers and the science subjects are taught by persons having no scientific background. Educated women, particularly science graduates, will be appointed in schools. Women should be given preference for employment in health care and nutrition programmes for women.

There is an acute shortage of women nurses. However, assessment of schemes for training nurses indicates that their capacity is not fully utilized. Incentives of better pay scales with a proper promotion structure is required to attract more women. Steps should be taken to provide adequate security for nurses.

Professional Women in all fields including teachers and doctors should be given due representation in decision making and higher administrative positions.

ii) *Vocational Training*: The increased concentration of women in low skill, low wages, low productivity jobs is a result of the failure of programmes for training and education which are essential for entry into the modern sector. To enhance employability of women, women training would be expanded and diversified. All branches of technical and vocational training should be open to women. There would be no reservation on the score.

The existing training programmes for women broadly relate to two main skill categories; (i), traditional trades of varying duration like handicrafts, cooking, sewing and cutting, embroidery, knitting, leather work, durree making, wood-work, food preservation, hair-dressing, etc and (ii), non-conventional trades of electric, household appliances repairs, radio/TV, architectural drafting, secretarial trades (including computer), graphic arts, etc. The first category of trades are taught in very large number of small institutions like GVIs, industrial homes, women centres, community centres, and small industries training centres, which are spread all over the country. More formal training is given to women in TTCs run by the Provincial Directorates of Labour and Manpower. The total capacity of these TTCs is limited to 380 places.

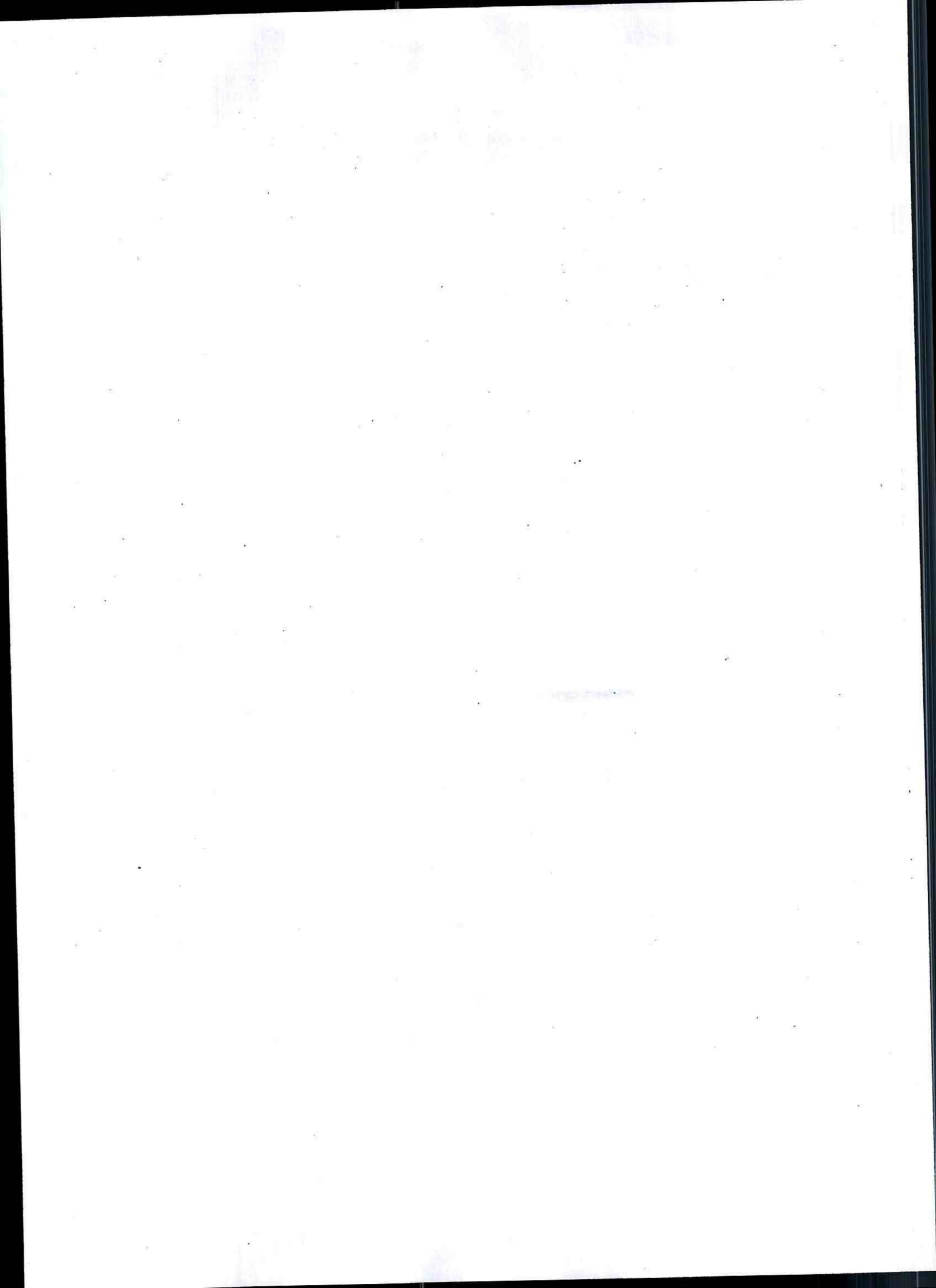
Labour Market Information System

38. The LMIS in Pakistan has been developed and expanded over time; at present it functions with varying degrees of accuracy and effectiveness. Statistics relating to various aspects of the labor market are collected and compiled by several Federal and Provincial agencies. The main sources are Labour Force Survey, Annual Establishment Enquiry, Censuses of Manufacturing Industries, Survey of Small and Household Manufacturing Industries.

39. A broadened approach in the collection and compilation of the information is needed to make the LMIS more useful. Such an approach will require (i) consolidation of existing data and data sources, (ii) a careful assessment of their existing and potential utility in the overall LMIS and as a basis for policies for employment promotion and manpower development, (iii) identification of data gaps and initiation of remedial measures, and (iv) an overall integration, systemization and strengthening of the existing sources of labour market information.

Financial Allocation for Public Sector Programme

40. Tentative investments for the sector is Rs.3284 million including Federal Programme, Rs 2820 million, of which Rs.1491.620 million will be spent on the ongoing projects, Rs.1328.380 million on new programmes and Rs 464.215 million for the Provincial Projects/programmes. Most of the sector's allocations will be utilised for programmes of vocational and technical training Statistical Appendix Table-II-3.1.



CRITICAL ISSUES

d- ENVIRONMENT

Introduction

Economic development is a function of three types of capital: human, physical and natural. In earlier years, primary emphasis was on the accumulation and maintenance of physical capital. Recently, attention has shifted towards human capital formation, particularly in the light of East Asian economic success. Costs to natural capital, imposed by the development process have, however, been largely ignored. Sustainable development is concerned with the productivity and maintenance of all three forms of capital. There is now a growing world wide concern about the acceleration in the pace of environmental degradation caused by unsustainable use of natural resources. Developmental process must not be at the cost of quality of life of the future generation. Sustainable development is therefore hinged upon strengthening the positive links between growth and environment.

2. Environmental problems in Pakistan include the wider world-wide issues such as threat of depletion of ozone-layer and global-warming as well as immediate local development like air and water pollution, desertification, soil erosion, water-logging, siltation of dams, deforestation and poor solid and hazardous wastes disposal. Considerable damage has been done to our eco-system by deforestation resulting in soil erosion, desertification and flooding. More than 60 percent of land in Pakistan has either already been or is likely to be affected by desertification. Soil erosion has affected 1.2 million hectares of land. Salt affected lands are estimated at 4.2 million hectares, while 2 million hectares are water-logged.

3. In Pakistan, concern with environment started in early 1970s, leading to some policy initiatives by the Government and involvement of NGOs in conservation activities but major initiatives have been taken more recently. Environmental Protection Ordinance was promulgated in 1983. In 1993 Environmental Protection Council approved the National Environment Quality Standards for municipal and liquid industrial effluents, gaseous emissions, motor vehicles exhaust and noise, for immediate enactment.

National Conservation Strategy

4. During second-half of Seventh Plan, Government increased its commitment to environmental improvement, supported by multilateral and bilateral aid agencies and NGOs. A National Conservation Strategy was formulated. In March 1992 the Cabinet accorded approval to National Conservation Strategy (NCS) and set-up a Cabinet Committee for implementing environment action programmes. A number of seminars and workshops on environment awareness and impact assessment (EIA) have been conducted. EIA guidelines for the energy sector and environmental quality control standards for municipal and industrial

emissions/effluents and for vehicles exhaust/noise have been approved. To introduce environment into formal education system and institutional set-up, two studies "Coordinated Environmental Education Programme" and "Strengthening of Environmental Management in Pakistan" have been completed. For effective policy plan formulation and for efficient implementation of National Conservation Strategy, a NCS Implementation Unit and Pakistan Environmental Protection Agency in the Ministry of Environment and an Environment Section in the Planning and Development Division with linked structures in all Provinces, have been established setting a stage for accelerating environmental actions in the Eighth Plan.

Eighth Plan Objectives and Strategies

5. Consistent with National Conservation Strategy, the Eighth Plan focuses on conservation of natural resources and sustainable development. These objectives will be achieved by two pronged strategy of greater people's participation in development and environment management; and taking note of long range environmental issues in economic decision making process. Citizen cooperation will be secured by launching mass awareness programmes, structuring environmental concerns into education systems, and most important by effective involvement of the communities under National Rural Support Programme.

6. Efforts will be made for improving environmental legislation and its enforcement, initiating EIA procedures for public and private investment planning and implementation, and factoring environment into public development expenditures.

7. Policy framework for addressing Pakistan's environmental imperatives is provided in National Conservation Strategy, which is a wide ranging cross-sectoral document. The NCS implementation agenda during Eighth Plan will focus on:-

- i) ***Creating a Coherent Statutory Framework:*** Legislative measures will be taken for effective environment protection and resource management including:-
 - enactment of fresh comprehensive legislation to cover air, water and land pollution;
 - regular review of the appropriateness and efficiency of existing laws; and making them precise to set down standards of acceptable conduct, and
 - improvement of existing laws to include toxic or hazardous substances, solid wastes recycling and re-use, pollution and coastal environment.
- ii) ***Strengthening of Regulatory; Technical and Participatory Institutions:*** To create a balanced implementation framework, the types of institutions need to be encouraged are : (i) public sector research, regulatory and planning institutions, (ii) local and community participatory institutions, and (iii) private sector institutions.

Environment Section in Planning and Development Division and its counterparts in Provincial Governments will be strengthened. For effective environment awareness, over-review and coordination of implementing environment projects at all levels, and their monitoring and resource mobilization; the capacity of apex NCS Implementation Unit in Ministry of Environment as well as of Planning and Development Units in Federal Ministries that bear directly on the environment, will be enhanced. Also capabilities of Federal Environment Protection Agency and related Provincial EPAs, which are primarily concerned with environment regimes i.e. setting up of realistic pollution standards and their enforcement, will be developed. In the private sector, NGOs dealing with environment will be given full support under Rural Support Programme; Communities will be organized to inter-alia deal with environmental laws.

Presently, a number of environment related laws such as Wildlife protection, Pesticide control, Motor vehicles emission's regulation, and Control of industrial pollution through Pakistan Environment Protection Ordinance 1983 exist. However, these laws are not being implemented fully and effectively. The existing laws have been scrutinized for the purpose of identifying provisions which relate to environment. A compendium of 58 such laws has been prepared. These laws, covering resource conservation and pollution management have been brought to the notice of the Provincial Governments for effective enforcement during 8th Plan period. In addition, a comprehensive Act on Environment would be formulated, to overcome the deficiencies of the existing laws.

- iii) ***Formulating and Implementing a Communication Programme:*** The Government and private sectors will participate in promoting environmental awareness. Government will ensure increased coverage of environmental issues in electronic media, development of environmental curricula for schools and colleges, initiation of environment oriented research and technology development, and holding of seminars/conferences and workshops. Private groups will be encouraged to do policy oriented research work for facilitating decision making. Further, activities aiming to highlight environmental concerns will be promoted through NGOs, Trade and Industrial organizations and rural communities.

Fourteen priority areas have been identified and the projects are being formulated for implementation. These areas include (i) Maintaining soils in croplands, (ii) Increasing irrigation efficiency, (iii) Protecting watersheds, (iv) Supporting forestry and plantations, (v) Restoring rangeland and improving livestock, (vi) Protection of water bodies and sustaining fisheries, (vii) Conserving biodiversity, (viii) Increasing energy efficiency, (ix) Developing and deploying renewables, (x) Preventing and abating pollution, (xi) Managing urban wastes, (xii) Supporting institutions for common resources, (xiii) Integrating population and environment programmes, and (xiv) Preservation of cultural heritage.

These fourteen priority areas of the NCS are not entirely new. Numerous activities consistent with these objectives have a long history in Pakistan's development experience, such as projects to reclaim waterlogged and saline lands, population control programmes and on-farm water management. The NCS has, however, tried to introduce a number of changes into development planning. In some cases, it only asks for a slight modification or re-orientation of existing programmes, in others a shift in emphasis towards some partially neglected areas, and in some the introduction of completely new areas into development planning. The last category includes, for example, urban air pollution and industrial waste disposal.

In order to effectively implement the programmes of National Conservation Strategy throughout the Country, all the Provincial Governments shall formulate respective Conservation Strategies indicating their action-plans with emphasis to carry forward the process of NCS implementation. The most notable example of attempts to re-orient existing programmes is the emphasis placed by the NCS on participatory implementation of projects, on the involvement of the private sector, and on defining and delimiting the role of the Government.

Management Issues

8. Environmental degradation is caused not only by large development projects that are subject to Government control but by the combined effect of countless small rural and urban consumers and producer activities that use natural and manmade resources. It needs a most desirable management regime that emphasises on decentralised decision making and extensive use of economic incentives to internalize environmental externalities. Pakistan has recently conceived national policies that focus primarily on the interests of conserving and developing the natural resources sustainably beside effectively abating pollution control. There is a need to develop strong linkages between economic policies, instruments and allocations and the conservation or protection of the environment. However, following measures may be taken to improve the situation:

- a) *Efficient Project Formulation:* There is an urgent need for expeditious project formulation and preparation as per NCS approved Action Plan for 8th Five Year Plan. These need to be implemented if Pakistan is to ensure that the degraded environment is not only stopped from further deterioration but put on the path of improvement thus paving the way for sustainable development. Henceforth, all environmental-related foreign assistance projects would have to conform to the ones outlined in the NCS. Thus, there is a unique chance for external donor agencies to select projects from the Strategy and be assured of prompt response from the Government, since it has already institutionalized the whole process of strategy-formulation by making it a part of the Environment and Urban Affairs Division (NCS Unit) and Planning and Development Division (Environment Section).

- b) ***Environmental Impact Assessment:*** A rapid assessment of qualitative environmental impacts of various projects is needed. For this purpose EIA guidelines have to be designed which will be first step in integrating EIA in a systematic way into the development planning and implementation process in Pakistan. These guidelines will optimise the benefits of development without degrading environmental quality, the natural resource base and the cultural heritage of the society as well as incorporate environmental considerations within the project planning cycle. The effectiveness of an EIA is largely determined by how successfully the community has been involved in the process. There should be preparation of recommended environmental monitoring programmes to be carried out by the project proponent following completion of system construction as part of the project's continuing operations and maintenance programmes. Successful use of an EIA System for large projects would require adoption of appropriate technologies for such assessments. For this high level theoretical trainings must be complimented with appropriate field experience under an experienced supervisors. Establishment of an Institute of Environmental Management for in-service training of Government officials is recommended strongly.
- c) ***Regulatory Command and Control Techniques:*** The primary approach to control environmental degradation should be the use on a national basis of regulatory command and control techniques which include health or ecology-based ambient quality standards, technology-based standards for effluent treatment and disposal, and enforcement procedures for facilities. Sole reliance on regulatory command and control approach is only successful if a broader and all-encompassing approach of "Regional Economic-cum-Environmental Developing Planning Process" is followed. Sophisticated monitoring and control systems are required to be used to abate pollution and maintain environmental quality. For this purpose strong enforcement of recently devised Environmental Quality Control Standards is essential. There has been very little enforcement of myriad laws and regulations already devised, despite the fact that some of these laws are very elegantly crafted and all reflect the best of intentions.
- d) ***Institutional Mechanisms:*** New mechanisms and institutions are essential to environmental management at all levels of Government with a view to ensuring full implementation of the law. The environmental sustainability policies can hardly be formulated, let alone implemented, without the proper institutional support from the Government. The relationships between environmental NGOs, Government environmental protection and planning agencies and the broader development decision-making process are of major importance in ensuring adequate environmental considerations in development processes.
- e) ***System of Incentives:*** An alternative way to check environmental degradation would be to relay on a system of economic incentives that effects behaviour of the vast majority of environment users in a predictable self-regulatory way. It will promote natural resource management and conservation.

Landmark of the Plan

9. A brief description of the fourteen core development programmes of the NCS is given below:-

- (i) ***Maintaining Soils in Croplands:*** The major problem facing soil in irrigated areas is waterlogging and salinity. For this the target of the Eighth Plan is to provide drainage for all saline areas where the water table is within 5 feet of the surface. The investment for this purpose is being shown separately under the Water Sector. For improvement of sodic soils, gypsum application is needed. Initially, this may involve some subsidy which is being provided for in the Agriculture Sector. Another major problem facing the soil is rapid depletion of organic content. This can be treated only through persuading the rural community to adopt green manuring and incorporating crop residues in the soil. The agriculturists will also be encouraged to use organic manure. Other steps to be taken in this field are planting of field border trees and practicing saline agriculture where needed. Research will have to be conducted before saline agriculture, green manuring and appropriate crop rotation can be indicated to agriculturists. Funds will be provided by the Government for research in these fields. However, extension work can be effective mainly in those areas where empowerment and effective participation of village community has taken place.
- (ii) ***Increasing Irrigation Efficiency:*** Irrigation Systems Rehabilitation Programme and Command Water Management are already under implementation. On-Farm Water Management, with the cooperation of local village communities, will have to be extended rapidly. Precision land levelling will have to be encouraged to ensure efficiency of water utilization. Use of sprinklers and drip irrigation may be introduced in certain areas to optimize water use. Small storage and water-harvesting projects may also have to be encouraged in appropriate areas. Financing of major projects including ISRP, CWDP and OFWM programmes is being shown under the Water Sector.
- (iii) ***Protecting Watersheds:*** For effective action, it is essential to have support and cooperation of village communities. Government contribution will be to provide expert staff for survey to determine land capability classification, and village communities could thereafter be encouraged to adopt appropriate land use. In certain areas forest development would be essential for soil conservation. In case of pasture, land grazing will have to be controlled to ensure shrub regeneration. In case of heavy conservation structures, Government funding may have to be provided. The programme are contemplated to be linked with the community empowerment programme.
- (iv) ***Supporting Forestry and Plantations:*** Forest management will have to be strengthened in Government owned and managed forests. Also, area under Government forests need to be extended. Trees can be planted along roads and canals. In the private sector, agriculturists can be encouraged to plant trees in

marginal land and on borders of fields. For this purpose arrangements will be made to supply saplings to villagers. Most of the expenditure on major afforestation has been included in the Agriculture Sector.

- (v) ***Restoring Rangeland and Improving Livestock:*** Cooperation of village communities is essential and the programme will have to follow the rural support programme launched by the Government. The productivity of rangelands will have to be increased through controlled grazing and introduction of high yield fodder. In certain areas, stall feeding of animals may have to be restored too. Livestock quality improvement programme will be successful only with the cooperation of the local village communities. Major animal husbandry programmes have been included in the Agriculture Sector.
- (vi) ***Protection of Water Bodies and Sustaining Fisheries:*** It is necessary to replace poisonous pesticides through biologically controlled pest management. This will improve quality of water bodies and facilitate fish farming. Treatment of sewage water will be an important part of the programme. Major water supply and drainage schemes have been shown in the Physical Planning and Housing Sector.
- (vii) ***Conserving Biodiversity:*** The programme involves the development of national parks and game reserves. Action will be taken for proper maintenance of all National Parks. Proper data base will be developed for medicinal plants and preservation of germplasm will be included in the programme. Action will also be initiated for preservation of endangered species.
- (viii) ***Increasing Energy Efficiency:*** Waste of power would be avoided by up-grading transmission and distribution facilities and effecting power factor improvement. Energy audit of industries will be conducted and saving of energy ensured by adopting suitable measures including boiler tune-ups. Minimum efficiency standards will be adopted for home appliances and efficient cooking stoves will be popularized. Energy efficient lighting arrangements will be encouraged. Tune-ups will be prescribed for vehicles. Action will be taken to introduce energy efficient building code. Investments in power transmission and distribution have been included in the Power Sector.
- (ix) ***Developing and Deploying Renewables:*** Agricultural and domestic wastes will be used for generation of energy on experimental basis. Bio-gas will be introduced as well as solar cookers and solar water heaters. Private entrepreneurs will be encouraged to produce such appliances. Beginning will be made to install windmills in suitable areas. Small hydel plants will be installed by SHYDO and WAPDA. Investment in hydel plants has been included in the Power Sector.
- (x) ***Preventing and Abating Pollution:*** Through regulations and incentives, industries will be encouraged to set up plants which avoid creating toxic wastes. EPA will set standards for this purpose and lay down policies for pollution avoidance or abatement. Pollution abatement equipment will be installed in existing industrial

units which pose health hazards. Some subsidies may be necessary to encourage installation of such equipment. Use of compressed natural gas will be popularized in transport vehicles. EPA vehicle emission standards will be applied and engine tuning will be made compulsory.

- (xi) **Managing Urban Wastes:** A beginning will be made to establish sanitary landfill. Composting plants will be encouraged in the private sector wherever feasible. Investments will be made in sewage treatment plants and oxidation ponds. Major investments in water supply and sewage have been included in Physical Planning and Housing Sector.
- (xii) **Supporting Institutions for Common Resources:** Government has already decided to launch a country-wide programme for rural support and empowerment of village communities. This will facilitate management by the community of common resources.
- (xiii) **Integrating Population and Environment Programmes:** Government has decided to accelerate the family planning programme. Special attention will be paid to extend the programme to ecologically fragile zones. Cost of the family planning programme has been included in Social Action Programme.
- (xiv) **Preservation of Cultural Heritage:** During the Plan period, increased investment will be made for preserving archaeological buildings and cultural heritage. Documentation and preservation of traditional cultural practices will be encouraged.

Target and Allocations

10. As would appear from the preceding brief description of the core programmes of NCS, these cover a wide field and overlap certain sectors in which Government has already been making heavy investments as well as sectors which have been left relatively untouched and where projectization is at an initial stage. The projects and programmes proposed by the Federal Ministries and Agencies as well as the Provincial Governments falling in the later category have been listed in the Statistical Appendix Table-II-3.2. It has been considered expedient not to include heavy investment in SCARP Programme, Irrigation Systems Rehabilitation Programme (ISRP), Command Water Development Programme and On-Farm Water Management Programme which have environmental implications but are better included in the Water Sector. So also major afforestation and animal husbandry projects and subsidy on gypsum application to soils which are basically investments in Agriculture have not been included. Ordinary water supply and sewage projects have also been left out. Transmission and distribution of power and hydel projects have similarly been kept in the Power Sector. The Population Welfare Programme has been included in the Social Action Programme. Thus the investment shown is only a small fraction of the total investment in environment related projects.

11. Apart from the projects shown in the Statistical Appendix Table-II-3.2, it is expected that NGOs will also implement a number of projects. It is proposed to create a Fund under the Environment and Urban Affairs Division for giving support to NGOs and providing incentives to the private sector for environment related projects.

12. The total cost of the projects proposed to be implemented during 8th Plan period are shown in the Statistical Appendix Table-II-3.2 including NGO Fund of Rs 0.500 billion is estimated at about Rs 21.585 billion. Of this Rs 3.530 billion pertain to Federal projects including a sum of Rs 0.500 billion for NGO Fund. In addition Rs 2.449 billion have been kept to implement Environment Projects in Special Areas including AJ&K, NA, FATA & Islamabad. Overall estimated cost of Environment Projects as prepared by the Provincial Governments amounts to Rs 15.589 billion.

13. Details of the NCS area-wise Core Environment Programmes are given in Statistical Appendix Table-II-3.3. Additional Environment related Projects of Federal Agencies reflected in other sectors and included in Eighth Plan are given in Statistical Appendix Table-II-3.4. Thus the overall allocation in the Plan for projects having beneficial effect on environment would amount to Rs 116.780 billion.

II-4

BALANCING OF GROWTH

a- WOMEN IN DEVELOPMENT

Pakistani Women are accorded esteem but like many other developing countries, they lag behind men because of cultural patterns, taboos and tradition, malnutrition, poorer health conditions and consequent low life expectancy, low education and school enrolment, high birth rates, and non-recognition of their economic work within the family. The present status of women is the result of long history of social, cultural and economic factors. Issues relating to women development are complex. There are no easy solutions for them.

2. Islam and the Constitution of Pakistan not only guarantees equal rights for women and prohibits discrimination against them on the basis of sex but also provides for fuller participation of women in all spheres of national life. According to the Constitution, the issue of women development is an integral part of overall development planning. It has indeed gained urgency and importance over time. Recent plans and programmes lay great emphasis on social sectors including women development. To look after the interests of women, a separate Women's Division was created in 1979. The Ministry has also been implementing special programmes for women development. The special programmes formed an integral part of Sixth and Seventh Plans and provided special facilities for women like training of women in income generating skills, construction of working women hostels and community centres, health care facilities, day care centres, legal aid centres, grant-in-aid for women development, etc. These special programmes supplement the sectoral programmes and are executed through the line departments, public representatives and NGOs.

3. In 1989, the first Women Bank was established to facilitate credit to women. A special minimum quota of 5% in the jobs in the public sector has been set for women. Larger minimum quotas were prescribed in the public sector openings more suited for women employment like nursing, teachers' training, etc.

Policy and Strategy for the Eighth Plan

4. The thrust of policy during the Eighth Plan will be (i) improving educational status (ii) expanding health facilities, and (iii) provide more openings for income generation. In addition removal of discrimination in education and employment and better information and communication of women issues, on their rights and responsibilities would be ensured.

5. The programmes will be executed by the line departments and NGOs and the Ministry of Women Development will concentrate more on advisory role in policy making, planning and coordination. The Ministry will execute projects of national level like training of persons belonging to public and private sector involved in women development and awakening campaign for women.

6. Salient features of various programmes relating to women development are given below:

Education

7. The Eighth Plan makes a larger allocation for education sector with emphasis on the access of girls to the primary education particularly in the remote rural areas. The school programmes will be supplemented by educational programmes through electronic media.

8. To make up the shortage of teachers and health personnel the secondary education for girls would receive high priority. Entry qualifications for women providers of health and education will be reviewed and relaxed where needed. Segregation problem of girls will be partially overcome through the distance learning programmes viz; correspondence courses supplemented through radio T.V. programmes.

9. The 8th Plan makes a larger allocation for education sector with emphasis on access of girls to the primary education particularly in the remote rural areas. 61 per cent of the new seats in schools will be for girls. Facilities will be made available with priority given to shelterless schools, improvement of school environment and teacher training, and increased availability of teaching aids and quality text books. These key inputs aimed at improving quality will be complemented by incentives such as, nutrition for girl students, security and transport for female teachers in rural areas, regulation of child labour and compulsory enrolment, wherever facilities are adequate. For girls primary schools, the government will buy land if the community is not able to provide free land in an easily accessible area. These quality enhancing measures are expected to reduce the drop-out rate. Co-education will be introduced at primary level under female teachers, wherever feasible. Female teachers working away from their place of domicile will be given special incentives.

10. To achieve the accelerated targets for girls enrolment, supply of female teachers, the training and improvement in their services conditions - higher allowances, relaxation of age, experience and qualification, provision of transport, security and appropriate transfer and posting policy will be ensured. Further, incentives subject to need and feasibility will also be provided to the girls students in terms of nutrition.

11. The participation rate for girls will increase from 53.7 percent in 1992-93 to 81.6 per cent in 1997-98. This will reduce the present difference of about 31.1 percentage points between the boys and girls participation rates to 13.9 percentage points, 45 per cent of those enrolled in 1997-98 will be girls compared to 37 percent in 1992-93.

Health

12. In the health sector, the focus of policy will be on rural areas, and on better utilization of existing facilities. The health programmes will be designed to take a better account of women's nutrition, health and child bearing, expansion of family planning services, and better access to water and sanitation. The coverage of the programmes will be improved through better supervision and involvement of communities/NGOs.

a) **Primary Health:** Women would be given preference for employment in health care and nutrition programmes for women. Professional women in all fields including teachers and doctors will be given the representation in decision making and higher administrative positions. Female senior level positions at district and provincial levels would be established and be filled through the same cadre of health workers, so that effective and attractive role models are provided to junior staff. A position of Ombudsperson to provide an alternative to the existing government system for female workers to redress their grievances, harassment, safety, or lack of supervision/guidance would be established. Similar personnel management activities would be taken up for the nurses deputed in rural areas.

b) **Health and Nutrition School Feeding Programme:** A girls school feeding programme will be introduced. It will not only improve the nutritional situation but also act as an incentive for the children to come to schools. The programme for girls will cover about 2.6 million students throughout the country. Its implementation will be carried out through the NGOs.

c) **Interventions for Diseases of Nutritional Origin:** About 65% children and 45% of women of child bearing age and almost 90% of lactating and pregnant mothers are suffering due to anaemia. Distribution of iron sulphate through PHC network coupled with proper nutrition education will be launched to control anaemia.

d) **Family Planning:** In order to bring 70% of the rural population under family planning coverage, each Union Council will select atleast two married women of 25 year or more, educated upto 8th class and based in villages with a population of 2000 plus. The total number works out to 12000 women who would be given 3 to 4 months training. The cadre would be trained at tehsil level and contracted at a fixed amount of Rs 1000 per month as per trainee fee.

Employment

13. The participation of women in employment is low and they lag far behind men in this field. Special effort will therefore be made to improve their education, skills and employability. This includes, (a) expanding education and training facilities for women, (b) opening up avenues of employment for them in all walks of life, (c) reservation of special quota in public sector jobs, (d) creation of congenial atmosphere in offices and factories for women and (e) removal of sex bias in employment. Facilities and incentives will also be extended for self-employment and development of cottage industries suited for women.

Vocational Training and Skill Development

14. Programmes of vocational training in the fields of secretariat work, computers, communications, pharmaceutical, hair-dressing etc. will be strengthened, expanded and improved. New field training areas like wax molding precision casting and electronics will be explored. About 25,000 women will benefit through specialised training institutes at provincial and federal headquarters.

15. The vocational training facilities will be supplemented by other related services like creation of positive work environment, appropriate technology, working women hostels, day care centres, vocational guidance, special credit facilities through 1st World Bank and Women Cooperatives.

16. The women welfare institutions like lady industrial homes, widows homes, socio-economic centres for Women etc. will be designed in such a manner that their programmes ensure involvement of women in development activities, employment and self-employment for income-generation or economic self-sufficiency of women. To enhance employment of women, women training would be expanded and diversified. Some proposed actions are:

- i) Through 'Salai Markaz', Socio-Economic Centres and Local Skill Training Centres numbering more than 5,000 about 5 million women will be imparted training. Order work would also be provided to 2000 women registered as skilled workers.
- ii) Through the Medical Social Service Projects established in big cities, district and Tehsil (HQ) Hospitals more than 1 million poor patients will be assisted. They will be provided drugs, blood, orthosis, prosthesis and financial assistance including counselling and guidance services.
- iii) Boarding and lodging facilities will be provided to nearly 2000 women through hostels for working women.
- iv) Through mother and children home (widow homes), destitute homes and rescue homes four to five thousand widows, destitute and way-ward women will be provided institutional care, training and rehabilitation services.

Extension Services

17. Women's participation in extension services in fields of agriculture livestock development, poultry/fisheries will be facilitated. Access to credit facilities and other modern inputs and in the area of health care services, will be ensured.

Removing Overt Discrimination

18. Affirmative action approach will be adopted and protect women rights of inheritance, ownership of property, access to education, employment and credit facilities etc. The legal structure will be reviewed with a view to weed out all discriminatory laws and practices. To fill the key positions involved with the formulation, implementation and monitoring of the women development programmes, preference will be given to women candidates.

Supplementation of NGOs Efforts

19. The NGOs will be supported to play a more active role and local participation will be given due recognition. In this regard the Ministry of Women Development will sensitize the NGOs and encourage them to expand their activities to rural areas. Technical assistance will also be offered to NGOs and they will be encouraged towards self-help activities as well as mobilization of local resources. For receiving support from the Ministry it will be mandatory for the NGOs to be registered under law especially under Voluntary Social Welfare Registration and Control Ordinance, 1961. The Provincial Governments will be kept informed about the support of the Ministry to the NGOs. They will also be involved in determining credibility of the NGOs and their performance evaluation.

Research Studies

20. During the 7th Plan period the Ministry had conducted seventeen research studies which included diagnostic and feasibility studies, as well as impact surveys. During the Eighth Plan research pursuits will be promoted and research findings will form the basis for planning of development projects.

Financial Allocation

21. The Eighth Plan allocation for the new programmes for women development by the Ministry of Women Development is Rs 2.1 billion (Statistical Appendix Table-II-4.1) of which Rs 1.575 billion will be spent on regular programme and Rs 0.525 billion (Statistical Appendix Table-II-4.2) will be for NGO's support programme (SWAP).

II-4

BALANCING OF GROWTH

b- RURAL DEVELOPMENT

About 68% of the total population in Pakistan lives in rural areas where quality of life has consistently lagged behind their counterparts in the urban areas. The literacy rate in rural areas is only 27.5% as compared to 57% in the urban areas. Safe drinking water is available to only 47% of rural population. The coverage for sanitation facilities is only 14% in the rural areas as against 60% in urban areas. Health facilities are inadequate. Employment and income opportunities are also limited. The rural areas usually receive a lower quality of social services.

2. The rural areas are high on the agenda of development and multifaced policies and programmes are being envisaged in this regard. A set of fiscal, financial and administrative policies and programmes have been introduced to promote rural industrialization. Physical infrastructural facilities including power, roads and telecommunications are being extended in the rural areas. In the Social Sector the main thrust is on primary education, basic health, nutrition and availability of water and sanitation facilities through the Social Action Programme.

Policies, Objectives and Strategy of Eighth Plan

3. Development Policies will be geared to accelerating the pace of rural development with a view to reducing the socio-economic gap between rural and urban areas and decelerate the pace of migration from rural to urban centres.

4. The rural development programme during the 8th Plan aims at the improvement in and better maintenance of rural infrastructure, provision of clean drinking water and education, health & sanitation facilities. The main focus of the Social Action Programme is on the rural areas. Emphasis will be placed on developing non-farm income generating and self-employment opportunities. For this purpose, credit and other facilities will be provided for small scale and agro-based industries, for improvement of agriculture, improved water management and for mechanization. Credit for purchase of equipment, machines, improved seeds will be liberalized and dispensation localized by setting up Kisan banks. Guidance will also be provided through banks, small industries organizations and cooperatives for setting up appropriate small scale and agro based industries. The cooperatives will be encouraged to form the nucleus of rural growth through which bank credit, farm inputs, machinery, implements and new farming technologies will be increasingly channeled and modern marketing methods introduced. Rural electrification, development of farm to market and link roads and telecommunication facilities will be expanded.

5. In order to make the rural society self-reliant, local institutions would be entrusted with more responsibilities and greater powers. The system of top-down development would be reversed. Rural communities would be encouraged to identify, formulate, implement and maintain development projects for themselves. Community participation will be encouraged.

People in the rural areas will be provided credit and training facilities to promote self-employment. Female educational and technical institutions in the rural areas will be strengthened to equip them for income earning activities.

Management Issues

6. At present the local government system in Pakistan comprises 4565 Union Councils, 119 District/Agency Councils, 301 Town Committees, 156 Municipal Committees, 2 Metropolitan Corporations, 15 Municipal Corporations and 40 Cantonment Boards. Out of 79157 local councillors 70320 i.e. 89% belong to rural councils. These councils also have representatives of women, peasants, workers and minority communities. This net-work of local councils which provides substantial leadership resources as a potent factor in any programme of social or economic development may be used for implementation of the development programmes. However, the local councils are not equipped to take over functions assigned to them. They suffer from constraints of resources-financial, technical, professional, manpower etc. Their resources need to be beefed up if additional responsibilities are to be transferred to them. A decision regarding transfer of functions of these departments to local councils will entail the following steps:-

- i) Allocations made to concerned departments for their activities may gradually be transferred to respective local councils.
- ii) The local councils may be assigned the responsibility for assessment and collection of property tax and other such taxes which can more effectively be managed by them.
- iii) There is a need for working out a via media and channel for the execution, operation and maintenance of the social sectors schemes including water supply and sanitation under People's Programme by the local councils.
- iv) The members and employees of local councils would require training for proper management of these services for which existing training institutions of concerned departments as well as of Local Government Departments would be utilized.

7. **Community Organizations:** Without community involvement and participation, development initiatives either in the economic or the social sector, have little chances of success at the grassroot level. To operationalise this objective, a realistic framework is necessary for collaboration between government and community organizations. Community organization does not mean a small group of influential local representatives. Participation means broad-based decentralized, homogeneous local organizations at the village and neighborhood level with decision making being done by all those whose common economic interest is best served by working together.

8. Pakistan has already tested various approaches to meet this objective. These experiences have had mixed results but have provided a number of lessons to guide future efforts at rural development.

9. Among the lessons that can be drawn from these experiences are:-

- i) Many efforts at rural development have tended to increase dependence on development agencies rather than enhancing local capacity to conceive and undertake development activities in accordance with local priorities and opportunities.
- ii) The federal and provincial governments have established a large number of specialized agencies which are hampered in their effectiveness and reach by the lack of a strong and broad institutional base at the village level.
- iii) At the village level, resource utilization for different resources tends to be integrated systematically. Development agencies, however, tend to be organized on a sectoral or functional basis instead of following an integrated, multi-functional approach. To make optimal use of village opportunities, it is important that villagers have the management capacity to integrate the assistance available from outside agencies with their own specific needs.
- iv) Many efforts at promoting group cooperation and activity have been captured by special interests that seek only to maximize their own benefits. To meet this problem requires special procedures and discipline that ensure participation of all possible beneficiaries and effective supervision of the development process.
- v) There is an urgent need to promote village-level capacity for innovation.
- vi) The creation of sustainable local institutions requires a time commitment longer than that of normal development projects: a project time frame of 10 years should be envisaged.

10. ***The Provincial Rural Support Programme:*** The Government of NWFP has already sponsored an NGO, the Sarhad Rural Support Corporation (SRSC) to implement a development programme in the Province along the pattern of the Agha Khan Rural Support Programme (AKRSP). SRSC initiated development activities in two districts of NWFP in 1989, and has a mandate to expand to other districts within the province.

11. In Balochistan, the Balochistan Rural Support Programme is now following a similar community-based development strategy. After seven years of project implementation, the Government of Balochistan decided to re-organize the bilateral Self Help Project as an NGO to accelerate the pace of village based development in the province. The National Conservation Strategy has incorporated the AKRSP participatory approach as part of its implementation arrangements.

12. The government has approved a proposal for the replication of community-based development approach in the remaining two Provinces of the country where no such programme currently exists. The proposal is that these initiatives be undertaken by two new government sponsored organizations in the two provinces of Punjab and Sindh: called the Rural Support Programmes (RSPs), to be established expressly for this purpose at the provincial level as non-private limited companies.

13. The overall objective of the RSPs would be the stimulation and support of rural development in those areas of the Punjab and Sindh that wish to enter into a partnership with the respective company.

14. In order to achieve this objective, the RSPs would undertake the following functions in conjunction with government agencies, non-governmental organizations, the private sector and possibly foreign donors:

- i) The creation, promotion and support of effective and disciplined Village Organizations (VOs) to manage rural development. Wherever possible,, existing or proposed organizations at the village level would be used or incorporated into this effort provided that they are willing to operate in accordance with the principles and terms of partnership of the RSPs.
- ii) The RSPs would serve as a flexible catalyst to assist in the identification of opportunities to promote equitable and sustainable development patterns and in drawing in the resources (technical assistance, training, financial and so on) to enable local people to make full use of these opportunities.
- iii) The RSPs would develop, through training programmes, a wide range of local skills in managerial and practical subjects. The purpose of this training is to increase the capacity of local people to manage more effectively their resources for sustainable and productive development.
- iv) The RSPs would work to link the Vos with government agencies, NGOs and private businesses that can provide services to support rural development.
- v) Wherever necessary the RSPs would undertake limited technical and socio-economic research to support and assess its programmes. The RSPs would seek to develop a network of collaborating institutions both national and international to participate in this research effort.
- vi) The RSPs would pay particular attention consistent with prevailing cultural and socio-economic factors to the opportunities and needs for involving women in rural development.
- vii) RSPs would also serve as a catalyst to link the VOs with those agencies that provide cost-effective use of services.

- viii) The RSPs would eventually aim to replace themselves and their functions with entirely local institutions if the experimental project expands into a full scale rural development programme.

15. In developing its approach, the RSPs would draw on the experience with rural development in Pakistan and elsewhere. AKRSP, operating in the Northern Areas and Chitral since December 1982 is of direct relevance. The SRSC experience in village based development would also be relevant to the proposed RSPs.

Consolidation and Rehabilitation

16. The lack of effective physical and social infrastructure is one of the most serious constraints inhibiting the realization of the growth potential in rural economy. The rural infrastructure is characterized by attributes of a public good especially in a society composed of a large number of small farmers and artisans each of whom is too small to undertake investments required in large-scale projects. The failure of the market to provide such services has to be corrected by mobilizing public resources at the Federal, Provincial and local levels through concerted and integrated efforts that should have considerable involvement of the community. The provision of an effective rural infrastructure particularly rural roads, electricity, drinking water, educational and health facilities is one of the most important investments through which the Government have direct impact on the constraints which the rural population faces.

17. The government has also recognized that the National Rural Support Programme will also assist in the planning and implementation of the Social Action Programme (SAP) and other programmes related to environment, agriculture, micro and cottage industry and rural credit. For this purpose the following arrangements have been agreed to with the Provinces:-

- a) Where rural communities have already been organized and rural institutions established, the Provincial Governments should work out the modalities of their involvement in the construction, maintenance and running of various components of SAP. In this process consultation with rural institutions will be necessary where these institutions have gained experience and can take over and maintain any of the existing development activities. The terms and conditions for such transfers should be worked out with their concurrence; and
- b) Where rural institutions are not available, interim arrangements will have to be worked out for involving local communities through nominated committees or other arrangements made for monitoring the implementation of SAP for ensuring efficient utilization of funds.

Landmarks of Eighth Plan

18. The poor living conditions in the rural areas and inadequate employment opportunities act as a major factor for the educated youth and others to migrate to cities. The rural areas are, thus, being deprived of an important resource-educated manpower while the problems of the urban areas too are thus being further intensified. The improvement of living conditions in the

rural areas along with the creation of employment and income opportunities would go a long way in reversing this rural to urban shift.

19. The former Tameer-e-Watan Programme has been further rationalised under the name of People's Programme. This Programme aims at the fulfillment of development needs of people through elected representatives. People's Programme coupled with other policy initiatives such as organizing of a literacy corps with its roots in rural areas to impart literacy to adults including women, decentralization of management of government schools and hospitals in the rural areas by involving union councils or other representatives will significantly improve the living conditions of rural masses in the years to come.

20. To achieve this objective, Eighth Plan proposes the following targets;-

- Construction of about 10,000 kilometers of farm-to-market/rural roads.
- Providing drinking water to about 27.41 million additional population - coverage of 70.5% rural population.
- Providing sanitation facilities to about 18.81 million additional population - coverage 31.5% rural population.
- Providing primary education to about 4.2 million additional children between the age of 5-9 years in the rural areas.
- Providing teacher training to about 0.213 million teachers in rural areas.
- Providing non-formal education (adult education) to about 6.0 million adults in the rural areas.
- Providing population welfare services to about 2.06 million additional acceptors in rural areas.
- Strengthening of nutrition component in primary health care by establishing nutrition clinics in basic health units and rural health centres.
- Upgrading 3874 existing and construction of 252 additional Basic Health Units.
- Upgrading 492 existing and construction of 45 additional Rural Health Centres.
- Covering 90% children and 90% mothers under the preventive programme (Immunization programme).
- engage 33000 village health workers in the rural areas.
- Providing electricity to 19700 additional villages/abadis.

21. The details of these targets may be seen at Statistical Appendix Table-II-4.3 Province-wise targets are given at Statistical Appendix Table-II-4.4.

22. Construction of farm-to-market/rural roads, rural education including training of local leadership, rural health centres including prevention of diseases, provision of safe drinking water and sanitation facilities and village electrification will be accorded priority during the Plan period.

Financial Allocation

23. In order to achieve the above targets financial resources to the extent of Rs 3.12 billion have been earmarked for rural roads and integrated development projects. In addition, Rs 160.32 billion have been earmarked for rural development under other sectors. In total, a sum of Rs 163.44 billion has been earmarked for the development of rural areas out of the total public sector outlay of Rs 752.13 billion. Moreover, Rs 15.00 billion have been earmarked for Peoples Programme during the Plan period.

II-4**BALANCING OF GROWTH****C- REGIONAL DEVELOPMENT****Objectives and Policy**

The economic and social development in the country reflects an uneven spread. Disparities among areas and regions in the stage of economic development, availability of infrastructural facilities and social indicators like education, health and sanitation present a disparate picture, not captured by national averages. There are pockets of poverty where even the basic amenities of life are not available. Partly it is on account of historical factors and partly due to the fact that the opportunities and benefits arising out of growth are not being equitably distributed among people and regions.

2. The pace of progress of less developed areas must therefore be accelerated. The key elements of the strategy are:-

- a) evolving and strengthening package of fiscal, monetary and other policies and measures which encourage investment, industrialization, transfer of technology and more productive methods of production in less developed areas.
- b) rapid expansions of infrastructural facilities such as power, water, roads and telecommunications in the less developed areas.
- c) special attention to improvement of social indicators in these areas. The focus of the Social Action Programme is on providing primary education, basic health, population welfare, sanitation and drinking water facilities in rural and backward areas.
- d) initiative of progress of human resources and skill development, self employment and income generation in backward areas.
- e) actively involve the people concerned in the development process and treating them as actors in development and not as an object of welfare.

3. Measures contemplated in pursuance of this policy are discussed in relevant sections. These are briefly outlined below:

Policy Framework

4. Less developed areas will be made more attractive for private investment. A number of fiscal concessions are already available for the promotion of industries in backward and rural areas envisaging reduction in customs duty, import surcharge and license fee on plants and machinery, income tax holiday and sales tax exemptions. Concessional credit is also available

for industries being located in these areas. The package of incentives and concessions and facilities will be reviewed to make it more effective.

Infrastructure

5. Inadequate infrastructure facilities like energy, roads, telecommunications and housing is a major handicap. During the Eighth Plan the programme of rural electrification will be expanded to 19,700 villages/abadis thereby bringing the total number of villages/abadis electrified to about 54,871. 10,000 Km. of rural roads will be added with emphasis on remote and backward areas. Telephone and postal facilities will also be improved in these areas. To improve the housing facilities 7 and 3 marla schemes will be extended to these areas.

Social Infrastructure

6. Backwardness is negatively correlated with education. For instance, Baluchistan which is categorised as less developed has the lower rate of literacy (i.e 10% as compared to national average of 26% in 1981). Education can be used as a catalyst in reducing the backwardness of the regions. The Eighth Plan will universalise access to primary education for all boys and girls of age 5-9 years. Less developed areas will receive higher priority.

7. Efforts will be made to improve the quality of services by creating a balance of promotive, preventive and curative care. Under the Social Action Programme basic health facilities will be extended to backward areas. These areas will be also covered comprehensively under the population welfare programme.

8. Potable water supply and sanitation facilities in rural areas are important components of the Social Action Programme. By the end of the Eighth Plan 32 percent of the rural population will have sanitation facilities and 71 percent will have access to clean drinking water.

Employment and Manpower Development

9. The employment policy will focus on investment in promotion of labour intensive activities like small and cottage industries. Traditional skills and products of these regions will be encouraged and marketing and other facilities provided through the provincial small industries corporations. Agriculture and related activities of these regions like poultry, sheep and goat rearing will be encouraged. Technical and vocational training centres will be set up with a view to upgrade the skills and open up self employment opportunities.

SPECIAL AREAS

10. Azad Kashmir, Northern Areas and the Federally Administered Tribal Areas share certain common geophysical location and economic characteristics. Their geographical location confers upon them strategic importance lying as they are along the north-eastern borders of the country adjoining Afghanistan, China and Occupied Kashmir. The whole region consists of high mountainous ranges with limited agricultural land. Furthermore, the areas are generally over-

populated and a significant proportion of the labour force in these areas is employed in un-skilled and semi-skilled service sectors with limited incomes.

Azad Kashmir

11. Azad Jammu & Kashmir, consisting of five districts of Muzaffarabad, Mirpur, Poonch, Bagh and Kotli, are spread over an area of 13,297 sq km with a population of 1.980 million. The density of population is 149 persons per sq km. Literacy rate is 43 percent. Land holdings are extremely small with 0.5 acres per capita and the cultivated area is only 13 percent of the total geographical area. An estimated 42 percent of area is under forests of which approximately 27 percent is commercially exploitable.

12. The allocation proposed for Azad Kashmir in the Eighth Plan Public Sector Development Programme are given in Table-4.1

Table-4.1
Distribution of 8th Plan Allocation
(Azad Kashmir)
(1992-93 Prices)

Sectors	Allocation (Million Rs)	Percent Allocation
Agriculture & Environment	1928.0	19.82
Industry & Mineral	300.0	3.08
Water	215.0	2.21
Power	1600.0	16.45
Transport & Communications	1775.0	18.25
Physical Planning & Housing	1340.0	13.77
Education & Training	1465.0	15.06
Health & Nutrition	1105.0	11.36
Total:-	9728.0	100.0

Northern Areas

13. The Northern Areas, consisting of the five districts of Gilgit, Skardu Diamir, Ghanche and Ghizer are spread over an area of 72,496 sq km with a population of 573,614 persons. The density of population is 8 persons per sq km. The literacy rate is 14 per cent compared to the national average of 26 per cent. No proper agricultural statistics exist, but according to one estimate, there are 100,000 hectares of cultivable land, of which about half is under cultivation.

14. The allocations proposed in Eighth Plan Public Sector Development Programme for Northern Areas are shown in Table-4.2.

Table-4.2
8th Five Year Plan 1993-98
Financial Allocation
(Northern Areas)

Sectors	Allocation (Million Rs)	Percent Allocation
Agriculture	106.0	2.06
Industries & Minerals	50.0	0.97
Irrigation	100.0	1.95
Power	1000.0	19.45
Transport & Communi- cations.	1100.0	21.40
Physical Planning & Housing	400.0	7.78
Education & Training	632.0	12.29
Health & Nutrition	392.0	7.62
Rural Development	414.0	8.05
Institutional, Monitoring and Research	12.0	0.23
Environment	935.0	18.20
Total:-	5141.0	100.0

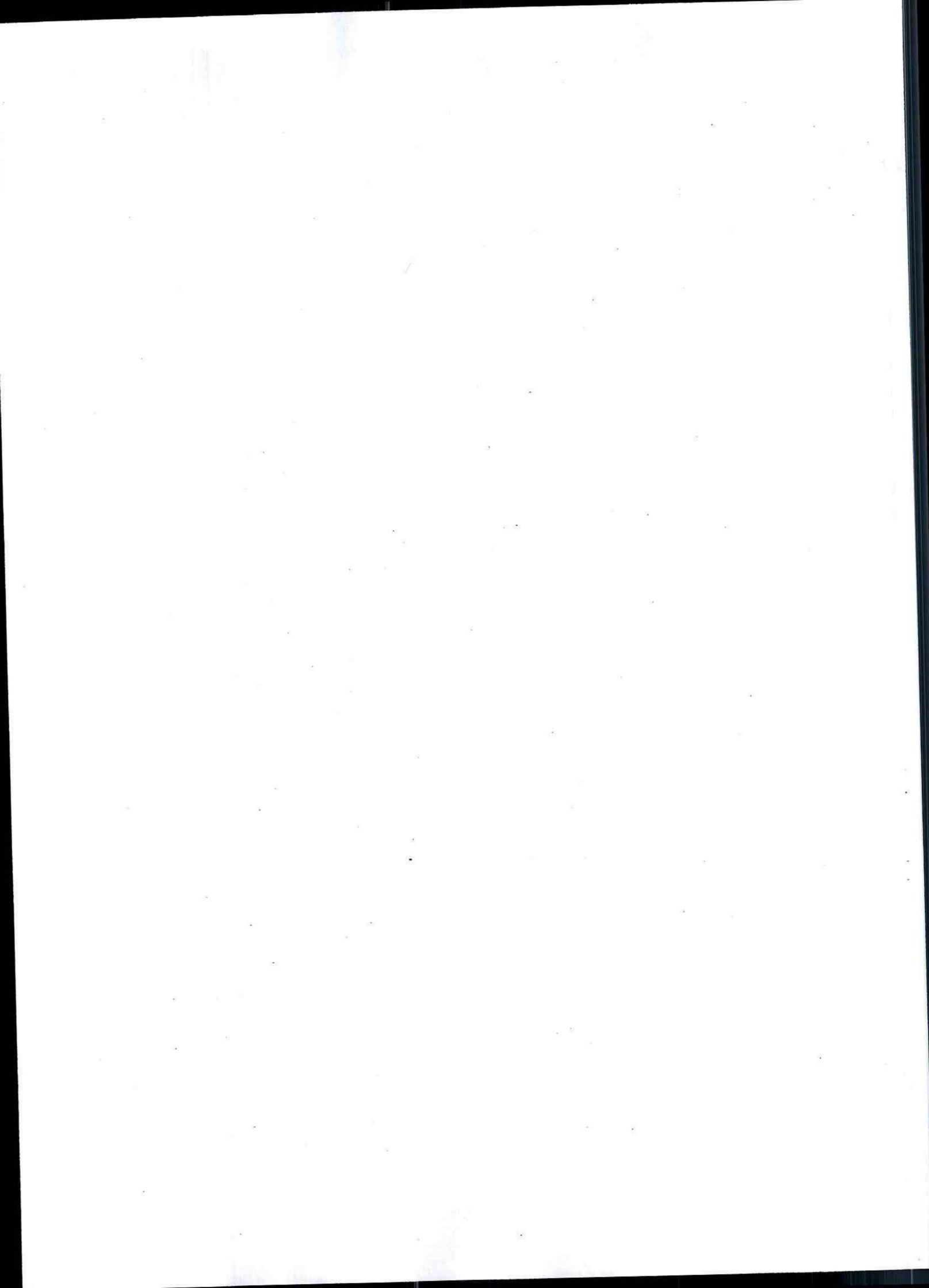
Federally Administered Tribal Areas (FATA)

15. FATA comprises seven political agencies with an area of over 27,000 sq km with a population of 2.199 million. The population density is 81 persons per sq km. Average rainfall varies between 305 mm to 813 mm. The total cultivated area is estimated at 141 thousand hectares which is 5.2 per cent of the reported area. About 55 per cent of the area is irrigated and the rest is barani. The economy of FATA is agricultural. The main crops are wheat, barley, maize and rice. The literacy rate is about 11 per cent and the labour force participation rate is 24 percent for males.

16. The allocations proposed in the Eighth Plan Public Sector Development Programme for FATA are given in Table-4.3.

Table-4.3
Eighth Plan Allocation
(FATA)
(1992-93 Prices)

Sectors	Allocation (Million Rs)	Percentage Allocation
<u>FATA</u>		
Agriculture	415	4.76
Forests	1193	13.67
Power	712	8.16
Transport & Communications	2362	27.07
Public Health Engineering	1115	12.78
Health & Nutrition	500	5.73
Housing	235	2.69
Education	1632	18.70
Rural Development	178	2.04
Research & Development	70	0.80
Environment	314	3.60
Total:	8726	100.00
<u>FATA/DC</u>		
Water	693.00	54.57
Physical Planning & Housing	61.00	4.80
Minerals	443.00	34.88
Industries	73.00	5.75
Total:-	1270.00	100.00



PART-III
SECTORAL POLICIES AND PROGRAMMES

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III-1

AGRICULTURE

Introduction

Agriculture is the single largest sector of the economy of Pakistan accounting for over one-fourth of the Gross Domestic Product (GDP), employing about half of the labour force and generating a substantial share in export earnings. Agriculture has maintained an average annual growth rate of 4.4 per cent during the last decade.

2. The emphasis of the Eighth Plan is on using the agriculture sector as the main instrument of growth and development. The primary sectoral goal is the achievement of a growth rate higher than the population growth, in order to ensure food security, self-sufficiency and large exportable surpluses. With the agreement on water accord, emphasis will now be laid on:

- Integrated management of agriculture, irrigation and drainage.
- Efficient land management.
- Efficient water management.

High priority will be given to optimize productivity from the available land and water resources through efficient use of other inputs while conserving the resource base. The main priorities would be as follows:-

- developing agriculture and irrigation facilities in an integrated manner, and their coordinated management.
- improving land and water management practices.
- larger use of medicine improvement in fertilizer response ratios, provision of land levelling, consolidation of on farm water management.
- better linkages between the systems of research, education, extension and production.
- integrated pest management.
- diversification to higher value crops, and non-farm activities i.e. livestock, fisheries and forestry.
- encouraging agro-industries in rural areas.

- improving productivity of barani areas.
- encouraging participation of women.

3. There is little possibility of horizontal expansion in the land area to increase agricultural production. Even the existing fertile land is shrinking because of non-agricultural uses, water-logging and salinity. Of the total cropped area of about 22 million hectares, about three fourth is irrigated, the remaining one fourth is dependent on rainfall. Presently, there are about 9 million hectares of land which is termed as "culturable waste", but cannot be brought under cultivation for lack of water. The easily exploitable water resources have already been harnessed and the country is short of irrigation water even for the existing agricultural areas. Increasing population requires a diversion of the already limited water supplies for non-agricultural uses.

4. While the barani and mountainous areas are capable of yielding higher productivity through improved management of the agricultural production systems, the real hope for a breakthrough in the medium term for rapidly increasing agricultural productivity, is in the vast irrigated areas. Estimates of the potential and actual yields in most parts of the irrigated plain indicate that the available resources of land and water are capable of producing more than twice as much agricultural produce compared to the current production. This, however, requires major changes in agricultural policies, institutions (education, research and extension system) and support services for agricultural production and marketing. Above all it requires a realization that the vast irrigation set-up is primarily meant for agriculture and should be planned and operated in close association with the agriculture sector. This would also require several administrative measures to effectively integrate policy formulation, planning and development of irrigated agriculture at various levels from the federal through provincial, regional and grass-root levels.

5. Substantial investment has been made in the previous development plans to create an infrastructure for both the agriculture and irrigation. The Eighth Plan will concentrate on getting the maximum return from this investment by improving operational efficiency through adequate investment in repair and maintenance, and provision of sufficient operational funds.

Management Issues

6. Agriculture production system is a complex enterprise requiring interaction of large number of organizations, institutions and specialized agencies at federal, provincial and grass root levels. Poor inter action between the agencies directly involved in agricultural development is the single most important factor responsible for the low efficiency of the agriculture sector. This will receive special attention.

7. The linkages between education, research and extension, and the farmers have remained fragile. The latest developments in agriculture, emphasis on agro-industry and production of export-oriented high value crops, require urgent strengthening of these linkages.

a) *Education*: Quality of agriculture education, especially higher education at college and university level should be improved by i) improvement of curriculum structure and production of textbooks relevant to the local conditions ii) improvement of student and teacher discipline and iii) providing adequate funds for the institutions to undertake quality teaching with proper emphasis on field and laboratory based training.

b) *Research*: The prevalent research system in the country will be thoroughly reviewed to assign specific responsibilities to the institutions and have a streamlined procedure for program planning, allocation of resources and monitoring of research results. Maximum efforts should be made to provide sufficient funds to enable the trained scientists in all research institutions including universities to pursue their research interests within the national research plan.

c) *Extension*: Major deficiency in extension is because of a poor career structure for the field staff which results in low morale and lack of motivation. Perhaps the answer is to privatize agricultural extension as far as possible, taking the lead from the cotton success story. More reliance should be placed on the audio-visual media and less on the individual extension agents who cannot have expertise in all commodities and farming systems. Electronic media can bring in experts on any aspect of agriculture for advising the farmers. TV and videos are particularly effective.

Consolidation and Rehabilitation

8. Agricultural policies during the Eighth Plan period will take into account ecological differences which exacerbate social and economic disparities. Special efforts will be made to channel technology and resources, differentiated by agro-climatic and ecological zones, to small and medium-sized farms. More attention will also be given to rainfed, dryland and desert and hilly areas, which have often been neglected.

9. The profitability of the agriculture sector will be improved through sustained improvement in agricultural productivity, availability of institutional credit for purchase of inputs, machinery and implements, and provision of remunerative support prices to farmers. Under the Productivity Enhancement Programme, farmers will be provided gypsum for reclamation of sodic soils, good quality seed, deep tillage equipments, etc for increasing the yield and production of crops.

10. In order to improve the socio-economic conditions of people residing in rural areas, non-farm activities such as livestock, agro-forestry, fisheries, agro-industries will be promoted. The Agri-Business Cell of the Ministry of Food and Agriculture, will promote private sector investment and participation in agro-industries. The private sector will be encouraged to establish processing, packaging, marketing and grading facilities for horticultural products with a view

to meet requirements of the export market. The Government has already formulated policies for rapid rural industrialization.

11. A major challenge would be to reverse the degradation of natural resources caused by deforestation, overgrazing, and minimize damaging effects of agro-chemicals on the environment. For this purpose, a 25-year Forestry Master Plan has been prepared and its implementation would be started during the Eighth Plan. An environmental protection project will also be implemented during the Eighth Plan.

12. In the livestock sub-sector, programmes for livestock research, extension, disease control and productivity improvement will be implemented.

13. In research, the use of biotechnology in improving crop and livestock productivity will be promoted.

14. The operational elements of the agricultural policy shall be as follows:

- The Pakistan Agricultural Research Council and the provincial agricultural research institutes will carry out site specific, problem oriented research, the result of which will be transmitted to the farmers through the agricultural extension system. Linkages between research and extension would be strengthened;
- research and development activities will be undertaken for the production of improved seed specially of sugarcane, rice, wheat, oilseeds and pulses;
- crop productivity will be enhanced by improving the efficiency of agricultural inputs particularly fertilizer and water. Integrated pest management would be promoted for control of insects and pests;
- improved irrigation practices will be popularized. Farmers will be guided on the water requirement and frequency of irrigation of different crops. Conjunctive use of water (tubewell + canal water) would be encouraged in water deficit areas where the ground water is suitable for irrigation;
- sprinkler, trickle and drip irrigation system will be introduced in water scarce areas, particularly for orchards and other high value crops;
- proper soil management will be promoted under the Productivity Enhancement Programme by providing deep tillage equipments to the farmers for breaking of the hard pan where necessary and conservation of soil moisture in barani areas. Precision land levelling will also be encouraged;
- the availability of certified quality seed of high yielding varieties of major crops, fruits, vegetables and oilseeds would be ensured. Private sector would be further encouraged to undertake production and distribution of good quality seed;

- the availability of agricultural credit will be ensured particularly for small and medium farmers through supervised credit system, in order to enable them to purchase agricultural machinery, equipment and other inputs. The activities of the Agricultural Development Bank of Pakistan and Federal Bank for Cooperatives will be expanded to meet the credit requirements;
- in the field of agricultural extension, the traditional emphasis of personal contact between extension workers and farmers will be supplemented by intensive use of audio-visual media, thus making more effective use of the limited number of expert communicators available in the country. A substantial portion of the facility of the second television channel will be used for agricultural programmes;
- in barani areas, high yielding, drought tolerant varieties of food and fodder crops shall be further promoted, with a view to improve the agricultural productivity and farm incomes of people of these areas. Dryland farming techniques will be disseminated among the farmers;
- the private sector will be encouraged to establish supply centers for providing standard agricultural inputs in every union council;
- consolidation of land holdings would be encouraged in order to arrest the declining production trend of farmlands subjected to continued fragmentation. The Provincial Governments should take appropriate measures in this regard;
- livestock research and extension will be strengthened in order to increase the production of milk, meat and other livestock products. Feed and fodder resources will be developed in order to provide a balanced and nutritious feed to livestock;
- intensive forest management will be carried out on Government forests and farm forestry will be promoted on private lands, to meet the growing demand for timber and firewood;
- comprehensive programmes will be implemented to reduce the degradation of land and water resources and environmental protection;
- in order to increase the production of fish, aquaculture and marine fisheries will be promoted. For inland fisheries, the existing hatcheries and research facilities will be strengthened. In case of marine fisheries, the infrastructure facilities, equipment and management of fish harbour would be further improved;
- in case of high value crops, special emphasis will be laid on growing for the export market. The private sector will be encouraged to establish processing, grading, packaging and cold storage, etc. through provision of liberal credit. The Agri-Business Cell in the Ministry of Food and Agriculture would provide advice to entrepreneurs regarding quality standards and other requirements of the different export markets; and

commercial tea cultivation will be promoted in Mansehra district of NWFP. Extension services and credit facilities will be geared to this objective.

Landmarks of Eighth Plan

15. The crop production targets for the Plan are related to water availability and additional areas expected to be brought under cultivation during the next five years. The water resources development programme is designed to provide an additional 8.16 million acre feet (MAF) of irrigation water at the farmgate. It is estimated that about 50 per cent of the additional water will be utilized for increasing the cropping intensity and the rest will be utilized for irrigating additional 0.7 million hectares of cropped area. Thus the total cropped area is expected to increase from 21.4 million hectares in 1992-93 to 22.1 million hectares in 1997-98.

16. The major share of additional area expected to be brought under cultivation would be utilized for wheat, oilseeds, fruits and vegetables, fodder, etc. The change in cropping pattern expected due to allocation of additional area to different crops in the next five years is given in Table-1.1

Table-1.1

Estimated Share of Crops in Additional Area to be Brought Under Cultivation During the Eighth Plan

Crop	% Share in Cropped Area		Additional Area	
	Benchmark (1992-93)	Target (1997-98)	(000 Ha)	% Share
Wheat	36.6	36.2	182	26.2
Rice	9.8	9.7	42	6.0
Maize	4.0	4.0	35	5.0
Other cereals	5.1	5.0	-	-
Cotton	12.2	11.8	-	-
Oilseeds	2.1	2.8	175	25.0
Pluses	7.0	7.0	42	6.0
Fruits, Spices and Vegetables	4.0	4.3	84	12.6
Sugarcane	4.0	4.0	28	4.0
Fodder	13.1	13.2	112	16.0
Tobacco	0.2	0.2	-	-
Others	1.9	1.8	-	-
Total:-	100.0	100.0	700	100.0

17. This represents a desirable cropping pattern which would be brought about by suitable policy measures such as support prices, availability of institutional credit, improved seed, marketing facilities and incentives to farmers.

Production Targets

18. The crop production targets have been fixed keeping in view the domestic and export requirement and the technical feasibility to achieve them. The targets have taken into account additional production likely to be obtained from the use of additional water, appropriate doses of fertilizer, improved seed, better plant protection measures and farm management practices. It has been assumed that adoption of suitable policy measures and modern packages of production technology will increase the per acre yield of crops. The crop production benchmarks and targets for the Eight Plan are given at Statistical Appendix Table-III-1.1

19. The crop production targets will be achieved by adopting the following measures :

- intensive crop maximization programme would be carried out for improving productivity;
- production of selected commodities in a specific ecological zones will be facilitated through input of basic and applied research and packages of improved production technology for farmers;
- balanced application of fertilizers, including micro-nutrients and soil amendment;
- expanded use of certified seed;
- adequate plant protection coverage against pests and diseases. Integrated pest and disease management programmes should be promoted where feasible. In areas and for crops, where conditions permit physically, technically and economically, aerial spraying should be carried out;
- additional water, both surface and sub-soil will be exploited through construction of additional facilities and installation of tubewells so that the declining trend of tubewell installation is not only arrested but also improved;
- effort will be made to ensure uninterrupted supply of power for tubewells, diesel for agricultural machinery and irrigation water for increasing input use efficiency;
- arresting the adverse effect of waterlogging and salinity on the soil status. In addition to pumping of water, drainage should also get a high priority where found economical;
- incentive support prices for different crops keeping in view their cost of production;

- better management practices such as precision land levelling, timely sowing, improved cultural practices, timely application of water, fertilizers, pesticides, etc.; and
- the use of agricultural machinery should be encouraged for agricultural operations for which labour in peak seasons is not adequately available.

20. Some of these elements are discussed below:-

Availability of Inputs

21. The inputs required for the achievement of crop production targets are given in Table-1.2. Appropriate measures will be taken to improve the availability of these inputs.

Table-1.2

Crop Production Inputs: Benchmark and Plan Targets

Inputs	1987-88 (Actual)	1992-93 (Benchmark)	1997-98 (Targets)	Annual Growth Rate	
				Seventh Plan	Eighth Plan
Water availability (MAF)	111.2	125.12	133.28	2.2	1.3
Fertilizer offtake (000 'N' tonnes)	1720	20.65	2730	3.7	5.7
Seed distribution (000' tonnes)	100.0	138.0	260.2	6.7	13.5
Operational Tractors (000' Nos)	221.3	224.4	241.6	0.3	1.5
Plant Protection coverage(000 hectares)	2664	2745	2870	0.6	0.9

22. In order to realize the crop production targets, fertilizer requirements during the Eighth Plan are expected to increase by 5.7 per cent over the actual 1992-93 offtake. The growth rate for nitrogen is estimated at about 4.9 per cent, phosphate 7.6 per cent and potash 14.8 per cent. In quantitative terms, nitrogen is estimated to increase from 1,575 to 2,000 thousand tonnes, phosphate from 450 to 650 thousand tonnes and potash from 40 to 80 thousand tonnes by the end of the Eighth Plan. The total fertilizer use will increase from 2,065 thousand tonnes in 1992-93 to 2,730 thousand tonnes by 1997-98. This will mean an overall application of about

120 kg nutrients per hectare. The NPK ratio will improve from 3.8:1.0:0.1 in 1992-93 to 3.0:1.0:0.12 in 1997-98. The fertilizer offtake target for the Eighth Plan are given in Table-1.3.

Table-1.3

Fertilizer Offtake Target 1993-94 to 1997-98

(000' Nutrient tonnes)

Year	Nitrogen	Phosphate	Potash	Total
1992-93 (Base year)	1575	450	40	2065
1993-94	1650	475	50	2175
1994-95	1730	515	55	2300
1995-96	1815	555	65	2435
1996-97	1905	600	70	2575
1997-98	2000	650	80	2730
Annual growth rate	4.90	7.63	14.87	5.74

23. A major structural change in the fertilizer sector is expected to take place during the Eighth Plan period. The Government is taking measures to deregulate and privatize the import, production, sale and distribution of all kinds of fertilizers. Initial steps toward this objective have already been taken and the process is expected to be completed during the Plan period.

Improved Seed

24. The use of good quality seed is one of the basic requirements for increasing the production and yield of crops. It is a low cost input but has the potential to increase crop yield on an average by 20 per cent over commercial seed. Thus the use of quality seed by farmers remains an area of high priority over the other inputs.

25. The requirement of improved seed during the Eighth Plan are given in Table-1.4.

Table-1.4

Replacement Requirement of Improved Seed by 1997-98

Crops	Area (000 ha)	Seed rate (Kg/ha)	Seed required (000 tonnes)	Replacement rate (%)	Replacement (000 tons)
Wheat	8100	91	737.1	20	147.4
Rice	2160	20	43.2	20	8.6
Maize	910	40	36.4	33	12.0
Cotton	2600	25	65.0	100	65.0
Gram	1150	40	46.0	20	9.0
Others	-	-	-	-	18.0

26. During the Eighth Plan, all out effort will be made to fully utilize the capacity of the seed processing plants in the public sector. Private sector will also be encouraged to establish seed processing plants. Specific measures will be taken for improving the production and distribution and use of high quality seed.

Plant Protection

27. Pests and diseases are a major constraint in obtaining potential crop yields. It has been estimated that they reduce crop output by about 25 per cent. The use of pesticides has increased from 5,481 tonnes in 1981 to 13,030 tonnes in 1991. Despite the increase in pesticide usage, the plant protection coverage on the national level is only 12 per cent of the total cropped area. About 80 per cent of the pesticides are used on cotton and the remaining 20 per cent on sugarcane, rice, fruits and vegetables. Although the use of chemicals is essential for checking pests, diseases, weeds, etc, its indiscriminate use should be avoided. It causes health hazards, kills predators and other useful insects and damages the environment.

28. During the Eighth Plan, facilities for pest scouting, aerial spraying and quality control of pesticides will be improved and more emphasis will be laid on integrated pest management. Non-chemical approaches, such as use of resistant varieties, bio-control agents, field sanitation, adoption of useful cultural practices, will be promoted.

Mechanization

29. Mechanization has become necessary for intensifying production and increasing the speed of pre-harvest and post-harvest farm operations. The use of agricultural machinery for

cultivation, deep ploughing, ridging, sowing and harvesting of crops is increasing. It is estimated that 82,900 new tractors were inducted during Seventh Plan against a target of 146,000, thus raising the total operational fleet to 224,400 by 1992-93. The shortfall was mainly due to the increase in the rate of down payment to 15-25 per cent based on size of land holding and cost of tractors. In order to overcome these problems, the rate of down payment has been reduced to 10 per cent and a rebate of 5 per cent has been provided to farmers on timely payment of loans for tractor and other implements. The import of standardized make of tractors in complete built up (CBU) condition has also been allowed.

30. The Eighth Plan envisages a sale of 151,200 tractors. The farmers will be encouraged to use deep tillage implements, sub-soilers and ridgers under the productivity enhancement programme. Emphasis will also be given to installation of shallow and deep tubewells and use of sophisticated irrigation systems for increasing productivity. The total population of operational tractors is expected to increase from 224,400 in 1992-93 to 241,600 in 1997-98. A fleet of bulldozers and other heavy machinery will continue to be maintained in the public sector for land reclamation and conservation of water resources.

Agricultural Credit

31. Timely availability of credit to farmers has become essential to meet their production and developmental needs. The agricultural credit disbursement during the Seventh Plan is expected to increase from Rs 14 billion in 1988-89 to around Rs 16 billion in 1992-93. However, the total amount of agricultural credit disbursed during the Seventh Plan period is expected to be Rs 72 billion against a target of Rs 130 billion.

32. The following measures will be taken to improve the availability of credit to farmers :

- provision of credit against hypothecation of stored commodities and saleable assets like livestock to the agriculture sector;
- provision of rotating limits for production loans, to eliminate unnecessary documentation and complexities;
- production loans to small farmers, based on actual crop requirements rather than a flat assessment on acre basis;
- pass books to be provided within 2 years to all farmers by the concerned Revenue Departments; and
- establishment of Kissan Banks.

33. The total agricultural credit requirement during the Eighth Plan is estimated at Rs 303 billion against total estimated disbursement of Rs 72 billion during the Seventh Plan. During the Eighth Plan, the timely availability of agricultural credit, its disbursement and effective utilization specially in case of small and medium farmers will be ensured. The recovery system of agricultural loans will be improved.

Agricultural Marketing

34. An efficient marketing system is important for increasing agricultural production and ensuring better return to the producers. It also assures reasonable prices and quality of products to consumers and helps in minimizing losses between production and consumption centers. The elements of the marketing system which require attention include procurement, pricing, transport, storage, processing, grading, packaging, and proper management at different levels of the marketing channel. The following measures will be taken for improvement of the marketing system :

- the functioning of market committees would be reviewed to identify their shortcomings and remedial measures taken to improve their efficiency;
- federal and provincial marketing organizations need to conduct systematic surveys and research on the marketing of different commodities which would generate useful data for policy decision. For this purpose, the organizations should be adequately strengthened and necessary training facilities provided in their respective fields;
- a programme for improving the functioning of the regulated markets be worked out both in the Punjab and Sindh. The possibilities of setting-up regulated markets in the NWFP and Balochistan would be explored;
- there is a need for conducting a feasibility study to determine the storage facilities required in these regulated markets particularly for the perishable commodities;
- the grading of agricultural commodities increases returns to farmers and improves marketing efficiency. The process currently being promoted to link prices with quality should be intensified. One way of doing this, is that the implementation of support prices fixed on the basis of grades, should be strictly enforced; and
- the formation of growers associations should be encouraged for collective transportation of the produce to the markets, as well as, its storage and processing.

Support Price Policy

35. The support price for wheat, rice, cotton, sugarcane, gram, onions, potatoes and non-traditional oilseed crops, namely sunflower, soybean and safflower are fixed by the Government with a view to provide economic incentives to the growers. The objectives of the support price policy are to raise production through price intervention, stabilize prices and safeguard the interest of the farmers against undue fall in prices during the post-harvest period. The support prices are reviewed annually keeping in view factors such as cost of production, domestic demand, import and export parity prices, supply and stock position, comparative advantage of

crops, etc and are generally announced before the sowing time, in order to enable the farmers to properly plan allocation of area and input for different crops.

36. The following measures are envisaged to make the support price more effective during the Eighth Plan :

- a constant review of support prices of different crops will continue to be made and fixed in such a manner that the farmers are provided adequate incentive to increase their production and productivity;
- the cost of production methodology will be reviewed in order to obtain consensus of all the parties involved in crop production;
- the Government would provide full support as well as funds for effective implementation of the support price policy particularly for those crops which have failed to receive such assistance in the past;
- in order to implement the support price programme of perishable commodities such as onions and potatoes successfully and avoid undue losses, storage and processing facilities need to be set-up so that excess supply could be withdrawn from the market and released when shortage occurs; and
- Agricultural Prices Commission would periodically work out the domestic and international terms of trade and suggest remedial measures if there are any plausible distortions.

Agricultural Statistics

37. The availability of a comprehensive and upto-date database is a pre-requisite for effective policy formulation. All pertinent data relevant to agriculture such as land and water resources, climate, tenurial situation, land use, major agricultural inputs, irrigation supplies, marketing and consumption, etc should be available in the Ministry of Food and Agriculture for use by policy makers, researchers and farmers. The first step in rationalization of agricultural resource use will be preparation of a comprehensive database to facilitate subsequent analysis for improvement of resource utilization. The Economic Wing of the Ministry of Food and Agriculture will be strengthened to undertake the following activities :

- prepare a computerized database of land, water and climatic resources including quality characteristics and superpose on geographic map; and
- identify zones of agro-ecological similarity and determine land use patterns (crops, horticulture, livestock, forestry, rangelands, aquaculture) and suitable crop rotations which yield highest net incomes and promote resource conservation.

Agricultural Education

38. The existing agricultural education institutions, namely, Agricultural Universities at Faisalabad, Tandojam and Peshawar, Barani Agricultural College, Rawalpindi and Faculty of Agriculture, Gomal University were suitably strengthened during Seventh Plan to meet the requirement of technical manpower for the agriculture sector. The establishment of Agricultural Colleges at Multan, Quetta and Dokri is in progress. During the Eighth Plan these institutions will strive to improve the quality of education by giving emphasis on both the theoretical and practical aspects of agriculture. They would review the curricula, syllabi and text books and incorporate in them the latest developments, in order to make agricultural education responsive to present national requirements. The university staff and students would be encouraged to carry out research on practical problems in order to develop feasible solutions.

Agricultural Research

39. Emphasis will be laid on site-specific, problem oriented and productivity increasing research, the results of which will be transmitted to the farmers through the agricultural extension system and the electronic media.

40. The Pakistan Agricultural Research Council (PARC) will be responsible for coordination of research throughout the country in order to avoid unnecessary duplication of research efforts. It will carry out basic and strategic research while the provincial research institutes will deal with applied and adaptive research. The modest human and financial resources available for research should be judiciously used by prioritization of research needs and consolidation of scattered research efforts into a National Agricultural Research System, to address the urgent issues of agriculture and water sectors.

Agricultural Extension

41. The agricultural extension system is responsible for the dissemination of information and technology developed by research institutes to the farmers for improving agricultural productivity. In the past, there has been a tendency to blame the extension system for most of the problems of agricultural development. While the efficiency and functioning of agricultural extension requires improvement, it is not the major cause of overall inefficiency of the agricultural enterprise. The extension agent can only take knowledge to the farmers which has been developed by research institutes. Most of the research in the country has been carried out on well laid out research plots at experimental stations with little concern for net profitability to the growers. Such research is suitable for well organized resourceful farmers but is often not applicable to resource poor small farmers. Thus there is a need for the development of appropriate technology for small farms, as well as, provision of adequate credit facilities for the purchase of required inputs.

42. During the Eighth Plan, the Provincial Governments will review the extension system with a view to remove the deficiencies which are hampering its effectiveness. The traditional emphasis of personal contact of extension workers with farmers will be supplemented by extensive use of the electronic media. The already successful farm radio broadcasts to rural areas

will be further extended and increasing coverage will be given on the television network to agricultural programmes. The private sector, agribusiness companies and agro-industries will be encouraged to provide extension services to farmers in commodities of their interest.

Forestry

43. The total area under forests is estimated at 4.20 million hectares or 4.8 per cent of the total geographical area of the country which is quite inadequate to meet the growing demand for timber and wood, as well as, conservation and protection of the environment. The existing forests are classified as 42.8 per cent coniferous, 37.6 per cent scrub, 7.6 per cent mangrove and 6.5 per cent riverain. Irrigated forests account for 5.1 per cent and linear plantation 0.4 per cent of the area. A long-term goal of the forest policy would be to increase the forest area from the current level of 4.8 per cent to 10 per cent in the next fifteen years.

44. The productivity of forests is low. Some of the important factors for low productivity are, poor regeneration and low stocking of coniferous forests, faulty logging practices, deterioration of soil fertility, inadequate irrigation, poor quality of planting material, overgrazing and demand for arable land for crop cultivation.

45. There is considerable gap between the wood requirement and sustainable supplies. According to the Forestry Master Plan, the requirement for timber and fuelwood in 1997-98 would be 4.29 million cubic meters and 28.70 million cubic meters, respectively. Against these projections, the current estimates of consumption are 3.53 million cubic meters of timber and 26.02 million cubic meters of fuelwood. The deficit is roughly equivalent to a million hectares of land or 2.5 billion fast growing trees for fuelwood alone. However, the forests are capable of producing more wood per unit area as compared to what is harvested under the present system of management.

46. During the Eighth Plan, high priority will be accorded to the development of forestry, watershed and rangelands. Intensive forest management will be carried out on Government forests and farm forestry will be promoted on private lands to meet the growing demand for timber and firewood. The degradation of watersheds will be arrested through afforestation, soil conservation and proper management practices. In case of rangelands, programmes for reseeded of depleted areas with nutritious, high yielding grasses and plantation of fodder trees will be promoted to meet the feed requirement of livestock. A comprehensive Forestry Masterplan is under preparation and its implementation will be started during the Eighth Plan. An environment protection project would also be implemented to reduce the degradation of land and water resources and conserve the environment. The physical targets for forestry are given in Table-1.5.

Table-1.5

Physical Targets for Forestry Sub-Sector

Product	1987-88 (Actual)	1992-93 (Benchmark)	1997-98 (Projection)	Annual growth rate	
				1988-93	1993-98
Wood production (000 cum)	779	832	958	1.3	2.8
Fuelwood (000 cum)	357	438	505	4.2	2.9
Timber (000 cum)	422	394	453	(-) 1.04	2.8
Compact plantation (hectares)	33,000	46,755	58,000	7.2	4.4
Nursery raising (hectares)	375	1,006	1,200	21.8	3.6
Linear plantation (Av. Km)	2,000	1,677	2,000	(-) 3.5	3.6
Distribution of plants (Million No)	180	245	500	6.4	15.3

47. The management of wildlife will be given due attention. Many animal species are endangered because of pressures from hunting, poaching and habitat destruction. A high priority will be given to habitat preservation and restoration in order to ensure conservation of the whole ecosystem including fauna.

Animal Husbandry

48. The livestock sub-sector contributes about 30 per cent of the agricultural value added and 7 per cent to the GDP. However, the productivity of livestock is low. There is considerable potential for increase in their productivity in terms of meat and milk, through provision of adequate quantities of fodder and feed, genetic improvement of breeds, disease control and scientific management. There is scope for the establishment of feed lots for fattening of cattle and lamb for increasing meat production.

49. Livestock research, extension and health care facilities will be strengthened in order to increase the production of milk, meat and other livestock products. The development of feed and fodder resources will be given priority to provide balanced and nutritious feed to livestock. Free import of corn would be allowed to meet the requirement of the feed industry. Programmes would be undertaken for breed improvement by cross-breeding, artificial insemination, embryo

transfer technology and genetic engineering. The main goal would be to increase the productivity per animal. For disease control, vaccination coverage against locally endemic diseases will be increased.

50. The dairy development is constrained by seasonal fluctuation in the supply and demand of milk. Its supply exceeds the demand in winter, resulting in depressed prices. During the Eighth Plan, the private sector will be encouraged to set-up plants for drying of surplus milk thus substituting imported powdered milk. It would also stabilize prices throughout the year. In order to prevent spoilage and facilitate marketing of milk, chilling centres will be established in rural areas. A dairy technology training center will be established by the private sector.

51. The targets for livestock products are given in Table-1.6

Table-1.6
Production Targets for Livestock Products
(000 tonnes)

Products	1987-88 (Actual)	1992-93 (Benchmark)	1997-98 (Target)	Annual growth rate	
				1988-93	1993-98
Meat	1,357	1,795	2,484	5.8	6.7
Beef	661	844	1082	5.0	5.1
Mutton	542	763	1075	7.1	7.1
Poultry	154	188	327	4.1	11.7
Milk	13,319	17,120	22,039	5.1	5.2
Eggs	4,140	5,379	8,448	5.4	9.4
(Million Nos)					
Wool	44.70	50.54	57.74	2.5	2.7

52. During the Eighth Plan, special emphasis will be laid on increasing the poultry meat and egg production to meet the growing demand. Rural poultry which accounts for about 50 per cent of the production will be improved through use of rural breeds such as fayumi, better housing and management practices and increased coverage against contagious diseases. The research and development efforts will be concentrated on control of viral and other infectious diseases, improvement of diagnostic facilities and vaccine production. All the feed mills would be encouraged to establish quality control laboratories in order to guarantee the quality of their products.

Fisheries

53. There is tremendous potential for increasing the fish catch in the coastal and deep sea belt in the Exclusive Economic Zone (EEZ), but it has not been efficiently exploited. Similarly, the inland water resources have not been adequately managed and utilized for optimizing fish

production. Increased production of fish would help earn foreign exchange through increased export of quality fish, create employment opportunities along the coastal belt, provide nutritious food to the people and provide fish meal which is a major ingredient for poultry feed.

54. The construction of fish harbour at Pasni and rehabilitation of Karachi Fish Harbour were completed during the Seventh Plan. The construction of Korangi and Gawadar Fish Harbour will be extended to the Eighth Plan. A Fisheries Training Centre was established at Karachi for training of fishermen, skippers and other shore-based personnel.

55. During the Eighth Plan, the infrastructure facilities, equipment and management of fish harbors would be improved for increasing the quantity and quality of fish catch. The following measures will be taken for development of marine fisheries :

- a shrimp conservation policy will be followed by limiting the number of trawlers from the present level of 1,800 to 600, observe closed season for two months (June and July) to reduce juvenile mortality and forbid trawling inside the Indus delta;
- the conversion of trawlers into gillnetters and long liners would be encouraged to exploit the available demersal resources;
- the quality of catch will be improved by provision of facilities to chill it on board and introduction of quality control measures;
- the exploitation of crustaceans (lobsters and crabs) and bivalves (oyster, clams and mussels) would be promoted especially for the export market;
- research and development activities will be carried out to examine the feasibility of coastal aquaculture; and
- training to fishermen and skippers will be provided.

56. The fish production targets for the Eighth Plan are given in Table-1.7.

Table-1.7

Fish Production Targets

(000 tonnes)

Source	1987-88 (Actual)	1992-93 (Benchmark)	1997-98 (Projection)	Annual growth rate	
				----- 1988-93	1993-98
Inland	96	123	138	5.1	2.3
Marine	349	377	437	1.6	3.0
Total	445	500	575	2.4	2.8

Targets and Allocations

57. As a result of the policies and strategies to be implemented during the Eighth Plan, the growth rate of agriculture sector is expected to be 4.9 per cent. The production targets are at Statistical Appendix Tables-III-1.1 & 1.2.

58. A financial allocation of Rs 5.17 billion, excluding fertilizer subsidy, has been made for the federal programmes of the agriculture sector. The sub-sectorwise details are at Statistical Appendix Table-III-1.3. The major areas of attention are agricultural research, agricultural education, forestry and livestock development. Besides the allocation under PSDP, an indicative investment of the size of Rs 90.8 billion (at 1992-93 prices) has also been made under the private investment.

59. An allocation of Rs 0.5 billion has been made for subsidy on fertilizer during the Eighth Plan. The decline in subsidy is mainly due to elimination of subsidy on phosphatic fertilizers during 1992-93. At present, there is subsidy on potassic fertilizers which is expected to be eliminated during 1995-96.

III-2

WATER RESOURCES DEVELOPMENT

Objectives and Strategy

Pakistan has a vast water resource base which consists of Himalayan Watershed of about 155,000 mile² (401554 km²) with numerous glaciers feeding the Indus River System. In order to harness this resource, 3 major reservoirs, 19 barrages, 12 link canals, about 38000 mile (61152 km) long irrigation canals, more than a million mile (1.61 million km) long watercourses and 10,000 mile (16093 km) long surface drains have been constructed. In addition, there are over 290,000 public and private tubewells to tap the sub-surface water available in the basin.

2. On the average, over 140 million acre feet (MAF) or 17.27 million hectare meter (MHM) of water flows annually in the Indus River System. Additionally, precipitation over approximately 80,000 mile² (207254 Km²) of the Indus Plains and Peshawar Valley contributes about 40 MAF (4.93 MHM), out of which 25 MAF (3.084 MHM) falls in the canal command area. At present, only 105 MAF (12.95 MHM) of surface water supplies from the Indus River System are being diverted at canal heads for irrigation purposes.

3. The major goal of policy and planning in the water sector continues to be that of uplifting the agro-based economy of the country by maximizing crop production. This goal will be accomplished through progressively increasing surface water supplies, replacing public tubewells with private ones, improving existing management practices using the latest technologies available, and protecting land and infrastructure from waterlogging, salinity, and floods. Efforts will also be made to operate and maintain irrigation and drainage sub-systems at a high efficiency level.

4. The productivity of irrigated lands can be increased by minimizing water-logging and salinity and devising a proper mechanism to monitor, evaluate, operate and maintain the system in an integrated manner. In order to lower watertable in irrigated zones, SCARP tubewells were installed but could not produce projected results mainly due to low O&M budgets. Therefore, a gradual shift of tubewells from public to the private sector has been proposed using project approach. This will not only ease the financial burden on the public sector but will also help to narrow the gap between crop water supply and demand. Of course, moving towards a demand-based system would have a high pay-off but it is possible only by constructing large reservoirs at macro level and by improving surface water distribution and application sub-systems and conjunctive use of water at micro level.

5. Operation and maintenance, monitoring, evaluation, consolidation and rehabilitation, and management deficiencies with respect to administrative, institutional, and operational aspects of the Indus basin irrigation system are major issues that require a comprehensive policy.

6. Currently all projects executed by WAPDA have a built-in component of O&M that terminates one year after the completion of the project. Thereafter, the project is handed over to Provincial Irrigation Departments (PIDs) for their operation and maintenance. Such handing over procedure has several drawbacks. The executing agencies feel that their job is over as soon as the project is complete while PID's don't show much enthusiasm in taking over the project since they feel that they were not involved right from the project planning stage. The release and provision of inadequate O&M funds put the physical infrastructure of the project into jeopardy and slows down the personal motivation and project momentum. The existing O&M mechanism should be modified in such a way that only one agency handles both revenue collection and O&M funds allocation. Institutions should be run on self sustainable basis by devolution of responsibilities down to farmers and involving them in decision making. Inability of PIDs to efficiently operate and maintain the system, rigidity in operational rules and regulations are some other issues that deserve special attention from planners, policy-makers, implementers and end-users.

7. Monitoring and Evaluation (M&E) process has not been working satisfactorily in the past. Monitoring during the project execution period should aim at having the project completed in time, within the approved cost and with proper specifications. It must lead towards the refinement of planning and management concepts. Post-project M&E is equally important in order to compare and assess the real benefits of the project in relation with the planned benefits. M&E needs to be carried on actively even after the completion of the project and a mechanism needs to be evolved for its continued funding as projects in water and agriculture can be evaluated only when crops had been grown for a few seasons.

8. Work on consolidation and rehabilitation is proceeding effectively in On-farm Water Management and Irrigation System Rehabilitation Programmes. A similar approach is needed for other programmes in the water sector. In drainage sub-sector, the sector loan concept has already been approved under "National Drainage Programme" which cater to the financial needs of needy projects on a prompt basis.

9. The following strategies, based on the experience gained from the implementation of Seventh Five Year Plan, are proposed for implementation:

- i) continue improvements in irrigation system. Additional water storage to be organised;
- ii) new irrigation schemes in water deficient areas should be initiated;
- iii) monitoring and evaluation should be continued after the project termination so that performance can be evaluated. For this, funding arrangements should be organised;
- iv) partial responsibilities for O&M should be given to farmer's associations or private agencies so that O&M financial burden on the public sector is eased;

- v) small surface irrigation schemes, check dams, infiltration galleries, diversion weirs, delay action dams and flood irrigation schemes should be constructed in backward regions;
- vi) "sailaba" areas should be protected and developed in an environmentally safe manner;
- vii) tubewells should be installed to exploit good quality groundwater in potential areas;
- viii) conjunctive use of surface and groundwater based on scientific lines should be encouraged so that efforts to convert the rotation-based irrigation system to a demand-based system can bring desired results;
- ix) water conveyance efficiency of canals and drains should be improved by lining and remodelling;
- x) existing irrigation and drainage systems should be rehabilitated;
- xi) optimal water use through OFWM and CWM programmes should be achieved;
- xii) fertile lands should be protected from waterlogging and salinity by giving priority to disastrous areas having saline groundwater underneath. The exploitation of groundwater resources in Fresh Groundwater Zones should be left to the private sector;
- xiii) borderline waterlogged areas should be treated with preventive measures such as lining of minors and small distributaries, water regulation and management, OFWM and improved cropping pattern;
- xiv) in Fresh Groundwater Zones, privatisation should continue through SCARP Transition Programme; and
- xv) flood losses should be reduced in an economically sound manner so that resulting benefits of flood damage abatement measures exceed their costs as far as possible.

Management Issues

10. The aging Indus basin irrigation system is facing myriad physical, institutional and management problems. Some of them are threatening its sustainability and environment. These bottlenecks in the system should be removed by prioritising them on the basis of their seriousness.

Waterlogging and Salinity

11. It is proposed to complete on-going reclamation projects as early as possible. New projects should not be entertained. Full financial provision, as given in the plan, has to be made every year until the completion of the projects. In Saline Groundwater Zones, the latest technology will be used for new projects and the most economical measures will be adopted to tackle the disastrous area. However in Fresh Groundwater Zones, no new SCARP project will be initiated in public sector so that the sectoral cost can be reduced. In general, freshwater areas will be tackled by the private sector except where aquifer conditions are hard and difficult for drilling. In fresh groundwater zones, the transition of tubewells from public to the private sector will be accelerated and necessary power facilities will be provided. The borderline areas and areas free from waterlogging and salinity will be tackled by adopting preventive measures such as command and on-farm water management practices, water regulation, lining of minors and distributaries, surface drains, etc. It is observed that at present, surface drainage facilities are not maintained satisfactorily. Therefore, efforts were made to make-up for the maintenance negligence in drainage activities under Irrigation System Rehabilitation Programme. This programme partially covered the drainage system upto main and branch drains. Beyond this, farm or chak drains will be needed which are the responsibility of farmers. In order to achieve this, a legal cover for allowing the right of way through farmlands is proposed.

Mining of Fresh Groundwater Aquifer

12. In a recent study made on private tubewells, it was observed that mining of groundwater was taking place in a number of areas. Consequently, the intrusion of saline into fresh groundwater has started. It will be necessary to have strict regulatory measures that can guide the installation and operation of private tubewells in threatened aquifers.

Combination of Water with Other Inputs

13. The purpose of irrigation is to supply the right amount of water at the right time and at the right place. Besides water, agricultural production is dependent on soil conditions, crop varieties, seed rates, fertilizer use, cultural practices, and plant protection etc. Lack of attention to any of these can result in poor yields affecting the water use efficiency. Hence a programme for irrigation water application has to be integrated into overall farming plan to achieve potential yields. For this purpose, integrated efforts are required by the Irrigation and Agriculture Departments in consultation with the farmers.

Modification of Contractual Procedures

14. The present forms of contract documents need improvement to encourage more responsible tendering. This would be done by standardizing conditions and specifications of the method of measurement, provision for arbitration, interest on late payments, and tenderer's requirement to submit the work plan and stick to it. Standard tender documents for small, medium and large size contracts would be developed separately to reflect modern contracting practices and be adopted for uniform use by all implementing agencies. Also pre-qualification

procedures would be designed to include an appropriate investigative mechanism for verifying the applicant's credentials to prevent entry of unscrupulous elements.

Recovery of Operation and Maintenance Costs

15. The maintenance of completed projects is unsatisfactory. Special consideration would be given to improve O&M funding. Research has demonstrated that there are significant benefits in increasing the efficiency of O&M and providing it with adequate resources, thereby enhancing the agricultural productivity. The system of O&M recoveries from farmers is deficient and needs considerable improvements. The government has completed detailed study on the improvement of water and drainage charges, assessment and revenue collection procedures. An action plan composed of short and long term measures has been prepared for the full recovery of O&M cost of surface irrigation, sub-surface saline drainage and flood control and protection works. This will be done in phases through increased water charges, drainage cess and other appropriate measures.

Linkage between Research and Development

16. Traditionally research and development have been carried separately. There is no feed back to the planners and implementers for corrections or replanning. Therefore, special attention for an effective linkage between research and development is needed. Measures would be initiated to ensure this linkage.

Privatization

17. In the past, no conscious effort was made to mobilize the private sector's resources for development and maintenance of water schemes. The private sector can play an important role in the following areas:

- a) Ground Water Development;
- b) On-Farm Improvement (water conservation, land levelling, improved water distribution);
- c) Construction of field drains; and
- d) O&M upto minor and tertiary drain level through water users associations (WUAs), NGOs, and individual contractors.

Updating of Codes and Manuals

18. The codes and manuals used by Provincial Irrigation Departments and WAPDA have become outdated. Although these departments perform important functions regarding public tubewells, small dams, large reservoirs, link canals, afforestation, fisheries, reclamation and subsurface drainage, etc., but no comprehensive manuals are available for such activities. Departmental codes and manuals would be updated.

Co-ordination

19. Considering water as a critical input in the crop production process, the need for close coordination between the Provincial Irrigation and Agriculture Departments is self-evident. At field level, administrative and managerial functions of PIDs regarding water allocation are combined with advisory functions of Agriculture Departments rendered to farmers. At present, there is no coordination between these two functions. In order to achieve maximum water use efficiency, close coordination between these two sectors is a pre-requisite. Coordination Committees would be set up to provide a linkage between the water and agriculture sectors and promote efficient water use.

Research

20. Salient recommendations for research are:

- a) conducting research on the lines of Integrated Comprehensive Management (ICM) Concept of irrigated agriculture which stipulates treating the entire river basin as a single entity from the source (catchment) to the end use (farmer's field). This requires research re-orientation from the prevailing "Organization Specific" to "Basin Location Specific" mode;
- b) main focus of the research to be on "Applied" rather than "Basic" side tailored to the end user's requirement; and
- c) a Standing Committee on Coordination and Review of Water Resources Research would be established under the Ministry of Water and Power with appropriate level representation from concerned federal and provincial agencies.

Consolidation and Rehabilitation

21. In order to make-up for the maintenance backlog and improve the system on modern lines, the rehabilitation and remodelling work was initiated in all provinces under the World Bank and the USAID assisted programmes. Some of the SCARPs also contain rehabilitation, remodelling and lining components. Phase-I of Irrigation System Rehabilitation Programme was completed by the end of Sixth Plan and Phase-II initiated subsequently which will be completed during the eighth plan period. It will increase irrigation channel capacities resulting into increased water availability during early kharif and late kharif periods. With the implementation of Phase-II of the project, the availability of 1.5 MAF (0.185 MHM) of water saved under the Phase-I will be maintained.

Landmarks of the Eighth Plan

22. Chashma Right Bank Canal and Pat Feeder Canal projects will be completed and consequently, additional water of 1.25 MAF (0.154 MHM) will be made available to irrigate an additional area of 0.34 MAC (0.138 MHA).

23. Left Bank Outfall Project (LBOD) will be completed. This would help to reclaim a major portion of the irrigated land in Sindh province, provide safe disposal of agricultural and other effluents into the sea, thereby helping environmental concerns and safeguard human, animal, and wildlife of the area. Work on Right Bank Outfall Drainage Project (RBOD) will be in full swing by the end of the Plan.

24. Water-logging in the disastrous areas would be eliminated. SCARP transition programme will also be in full gear which will ease O&M burden on the public sector and involve the private sector in water resources development to a greater extent.

25. A pilot programme to evaluate the concept of transforming irrigation departments into autonomous bodies will be implemented with the ultimate aim of involving the private sector in irrigation management i.e. privatization.

Targets and Allocations

26. With the completion of ongoing surface irrigation projects like Chashma Right Bank Canal and Pat Feeder Canal additional water of 1.25 MAF (0.154 MHM) will be available to irrigate an additional area of 0.340 MA (0.138 MHA).

27. The fresh groundwater potential in the country will continue to be exploited by the private sector in addition to installation of a small number of tubewells by the provincial governments. The groundwater will be used in conjunction with the surface water. The overall increase in water availability at the end of the Eighth Plan will be about 8.16 MAF (1.00 MHM) from 125.12 MAF (15.43 MHM) to 133.28 MAF (16.44 MHM), of which surface water availability will be 81.95 MAF (10.11 MHM) and the groundwater availability will be 51.33 MAF (6.33 MHM). Water budget for the Eighth Five Year Plan is attached as Statistical Appendix Table-III-2.1.

28. Physical targets are attached as Statistical Appendix Table-III-2.2 and the detailed annual physical targets are attached as Statistical Appendix Table-III-2.3. A brief description of activities and targets in the major sub-sectors and the priorities assigned to these projects and programmes is given below:

Drainage and Reclamation

29. According to watertable appraisal carried out in April/June 1990, 13 percent of gross area i.e. 5.44 MA (2.20 MH) with depth to watertable (DTW) within 150 cm (5 ft.) from the Normal Surface Level (NSL) suffers from severe waterlogging. Province-wise position of depth to watertable showing disastrous areas is given in the Table 2.1.

Table- 2.1

Province-wise area underlain by depth to watertable in April/June, 1990.

Province	0- 150 cm (0 -5')		150 -300 cm (5' - 10')		0 - 300 cm (0 - 10')	
	MHA	MAC	MHA	MAC	MHA	MAC
Punjab	0.710	1.754	2.348	5.891	3.058	7.645
Sindh	1.348	3.331	3.434	8.485	4.782	11.816
Balochistan	0.093	0.230	0.077	0.190	0.170	0.420
NWFP	0.049	0.121	9.133	0.329	9.182	0.450
TOTAL:	2.200	5.436	6.028	14.895	8.228	20.331

Source:- Report of Sub-Committee on Water.

30. In the Eighth Plan, a pragmatic approach has been adopted to solve this problem. Out of 5.436 MAC (2.20 MHA) severely waterlogged area, about 1.072 MAC (0.43 MHA) is used for rice cultivation on non-perennial canal commands in Sindh and Balochistan. Most of it has already been provided with surface drains which would need to be maintained adequately for continued effectiveness. About 1.27 MAC (0.51 MHA) lying in completed SCARPS are also becoming severely waterlogged which can be improved through proper operation and maintenance. The remaining disastrous area of 0.425 MAC (0.172 MHA) lies in the Fresh Groundwater Zone (FGW), most of which is proposed to be controlled by the private sector. Only a small portion of this will be tackled by the public sector due to difficult aquifer conditions. Such areas lie in the commands of Kabul River Gravity Canal, Upper Swat Canal and the Bannu Basin. For the balance untreated area of about 3.4 MAC (1.38 MHA) lying in the Saline Groundwater Zone (SGW) and within the on-going projects, a relatively large program has been drawn up.

31. With the aim of eliminating water-logging in the "disastrous area" by the end of the Eighth Plan, following strategies will be adopted:-

- a) completion of on-going schemes as originally conceived would be given first priority;
- b) vertical drainage in FGW zone will be tackled by the private Sector, as before, except in difficult aquifer conditions;
- c) the areas not severely waterlogged may be tackled by using preventive measures such as (a) deliver only needed supplies of water, (b) provide proper grading to lands, and (c) changeover to extensive rabi cultivation;

- d) transition of public tubewells in fresh ground water area would continue in Punjab and Sindh; and
- e) gradual replacement of deteriorated SCARP tubewells, which is a provincial responsibility, would be continued. Productive tubewells will be handed over to the willing farmers.

32. Major physical targets expected to be achieved during the 8th plan under Drainage & Reclamation Programme are given in Table-2.2.

Table-2.2

Major physical targets of drainage related activities.

S.No.	Item	Unit	Punjab	Sindh	NWFP	Balochistan	Total
1.	SCARP Tubewells	NO	178	1422	-	-	1600
2.	Surface Drains	MCM	36.47	74.90	22.96	5.67	140
		KM	558	1145	351	87	2141
3.	Tile Drains	HA	165293	22218	20502	-	208013
		AC	408440	54900	50660	-	514000
4.	Transition of STW	NO	6120	1880	-	-	8,000
5.	Disastrous Area	MHA	0.48	0.83	0.030	0.04	1.38
	to be protected	MAC	1.192	2.05	0.081	0.097	3.42

Source:- Report of Sub-committee on Water.

33. An amount of Rs 38.997 billion (70 percent of the total allocation) has been provided for the anti-waterlogging and reclamation programme.

Irrigation

34. Water Budget for the Eighth Plan is at Statistical Appendix Table-III-2.1. An increase of 8.16 MAF (1.01 MHM) in the water availability is expected to be achieved from various sources, of which 3.31 MAF (0.41 MHM) will accrue from surface water and 4.85 MAF (0.60 MHM) from groundwater. In case of surface waters, additional availability of 1.24 MAF (0.150 MHM) is expected to be accrued from the On-Farm Water Management, Command Water Management, Canal Rehabilitation and Canal Remodelling, 1.19 MAF (0.147 MHM) from small irrigation schemes and small dams and 0.88 MAF (0.11 MHM) from lining of minors and distributaries. Chashma Right Bank Canal will contribute additional supplies to the extent of 1.13 MAF (0.14 MHM) after completion of its Stage-III. In the groundwater development, 0.5 MAF (0.06 MHM) is envisaged from SCARP and other public tubewells and 4.35 MAF (0.54 MHM) from private tubewells. As a result the cropped acreage is expected to increase by about 1.7 MA (0.69 MH).

Command Water Management

35. The programme endeavours to build a continuing capability, within the provincial agencies, to plan, implement, maintain an integrated and efficient programmes of irrigated agriculture and to strengthen farmers' participation for improving water and non-water input management. It also provides for developing water management techniques and reducing inequities in water deliveries between the head and the tail reaches.

36. Pilot projects in all the four provinces have been completed. Preliminary evaluation conducted by Command Water Management Directorate indicates that there has been an average increase of 8 percent in the cropping intensity. Therefore, there is a need to replicate such activities on wider scale. Financial allocations for this programme are proposed to be shown under the provincial part of the Eighth Plan.

Irrigation System Rehabilitation Programme

37. The rehabilitation programme in the Eighth Plan mainly consists of earthwork to strengthen the banks, provide free board and silt clearance, brick lining of the tail reaches to provide more reliable water supply to the tail users and clearing of drains to bring them back to their original discharge capacity. The Project will rehabilitate about 8870 miles (14275 KM) of irrigation channels benefitting a command area of approximately 10.2 MAC (4.128 MHA) and about 809 miles (1302 KM) long drains benefitting a drainage catchment area of approximately 2.0 MA (0.81 MH). Financial allocations for this programme will be shown under the provincial part of the Eighth Plan.

On-farm Water Management Programme

38. This programme has been continuing since 1976 with the assistance of the World Bank, the USAID and the Asian Development Bank and recently by the Government of Japan. It involves improvement and partial lining of watercourses, precision land levelling, establishment of demonstration plots, installation of micro irrigation systems and water lifting devices in barani areas, formation of Water User Associations, training of farmers and monitoring and evaluation of the accomplishments.

39. Works to be undertaken during the plan period include improvement and lining of 10,000 watercourses, precision land levelling of 55,000 hectares, establishment of 835 demonstration plots, installation of 32 micro irrigation systems and 12 water lifting devices, and training of 9585 farmers.

40. OFWM and Command Water Management Programmes are the only programmes in Pakistan where civil works are carried out by the beneficiaries themselves without any involvement of the contractor. The farmers contribute more than 50% of the improvement cost

* An Experience for Agricultural Production Directorate of Command Water Management Project Punjab, September 30, 1991.

through the Water User Associations which involves donated labour for the earthen reconstruction, cost of masons for civil works and 25% recovery of the cost of construction materials. As the farmers have realized benefits of the programme, their contribution towards the cost may be increased. Efforts would also be made to increasingly involve the water-users in the water management at the ground level. This programme will be shown as a part of the Provincial Plan.

Small Irrigation Schemes and Reservoirs

41. Under this programme, it is proposed to implement a large number of small schemes which aim at diverting flood waters for irrigation and storing it to recharge aquifers for the subsequent exploitation of groundwater by tubewells. It includes lift irrigation schemes in the water scarce areas of Balochistan, AJ&K, FATA and Northern Areas of Pakistan to increase surface water availability. Flood weirs, check dams, and small dams will be completed during the Eighth Plan. According to the modest estimates, the availability of additional water due to above schemes will increase by 0.06 MAF during the Plan period. Work on the construction of medium reservoirs will also be taken up which includes Mole Dam, Nangar Parkar and small schemes in arid zone of Sindh, Kuram Tangi, Tank Zam and Gomal Zam Dam in NWFP, Bolan, Hingol, Bund Khushdil Khan and Mirani Dam in Balochistan and ADB assisted small dams in Barani areas of Punjab. All these schemes are to be taken up by the provinces.

New Surface Irrigation Projects

42. The above mentioned salvage programme and the small irrigation schemes will not be able to meet the future water requirements beyond the Eighth Five Year Plan. Therefore, for future development, the option is to manage the existing irrigation system in a better way and to undertake new irrigation schemes wherever feasible. Stage-I and II of Chashma Right Bank Canal (CRBC) have already been completed. Stage-III will be implemented during the Eighth Plan. Remodelling of Pat Feeder Canal will be completed during the Plan period. Every year, during monsoon, the bulk of flood water goes unutilized to the sea. The existing system requires development of new irrigation projects on non-perennial basis. In the Eighth Plan, sixteen irrigation/extension projects stemming out of Water Accord have been indicated to be taken up by the Provinces (4 in Punjab, 5 in Sindh, 3 in NWFP and 4 in Balochistan). The methodology of approval for new irrigation schemes has been laid down by the Council of Common Interest (CCI) which require consultation with the Indus River System Authority on availability of water.

Private Tubewells

43. A large number of tubewells have been installed during the last few decades in private as well as in public sectors (about 300,000 by the end of Seventh Five Year Plan). It has been estimated that during the Eighth Five Year Plan private tubewells will be installed at the rate of 6000 per year contributing about 4.35 MAF (0.540 MHM) of water. For the effective development of private tubewells, following guidelines are proposed:

- a) fresh water zones would be tackled by the private sector except areas with difficult aquifer conditions;

- b) priority would be accorded to the farmers of the disastrous area (0-5' watertable) in the fresh water zones for obtaining the private tubewell subsidy;
- c) public tubewells which have outlived the economic life will not be replaced but instead, will be handed over to the willing private sector gradually. Similarly, productive tubewells may also be handed over to the private sector; and
- d) SCARP Monitoring Organization of WAPDA will also extend their activities to the private tubewells. Data on quality of groundwater and watertable depth would be made available to the farmers on demand.

Groundwater from SCARP Tubewells

44. During the Eighth Plan, 218 SCARP tubewells, including scavenger tubewells with an average capacity of 2 cusecs will be installed in the saline groundwater areas. The abstracted water will be disposed off into rivers and/or evaporation ponds. Environmental consideration would be given to the disposal of saline effluent. For this purpose, Environment Cell of WAPDA is being strengthened.

Other Public Tubewells

45. Presently, about 3100 number of the Public Sector Tubewells are being operated by the provincial Irrigation Departments. Their average capacity of 1.5 cusecs provides 451 AF of water at 50% utilization factor and 15% delivery losses.

46. The public irrigation tubewells, besides Punjab, are generally installed in Balochistan, FATA, NWFP and PATA areas. In these areas particularly in Balochistan, small irrigation schemes are being implemented to increase recharge rate of aquifer for abstraction through karezes and tubewells. It is estimated that 217 public tubewells will be installed annually during Eighth Plan under various schemes which would contribute 0.5 MAF each year towards total water availability.

Flood Control

47. The flood protection programme in the Eighth Five Year Plan has the following objectives:

- i) Planning Flood Management, based on integrated river basin, will continue;
- ii) bringing more land under cultivation by encouraging use of flood moisture for crop cultivation in sailaba areas; and
- iii) utilizing flood flows for augmenting water availability for irrigation.

For this purpose Rs 2390 million have been earmarked for flood control/protection programmes. A total of 165 number of schemes would be implemented during the plan period (42 schemes in Punjab, 46 in Sindh, 10 in NWFP and 38 in Balochistan, 19 in FATA, 5 in AJK and 5 in NA). The above include schemes to be undertaken under ADB assisted Flood Sector Project. The physical targets to be achieved include about 1428 MCFT of earthwork and 133 MCFT of stonework.

Survey and Investigation

48. The sub-sector comprises survey and investigation programme which is a continued activity being conducted by federal and provincial governments/agencies. In order to fully utilize surface and groundwater resources of the country for the development of agricultural lands of Indus Basin and also lands in other less developed areas, extensive survey and detailed investigations need to be carried out during the Eighth Plan.

49. During the Plan period WAPDA would undertake survey and investigations, inter-alia, in the following major fields:

- i) Survey and investigation of snow and ice in the upper catchment areas of Indus river;
- ii) Planning and investigation of main and off channel reservoirs;
- iii) Water Resources Development and Management Planning for Balochistan, NWFP, FATA and Northern Areas and Islamabad Capital Territory, improvement of existing hydromet network and river forecasting and warning system;
- iv) Monitoring of SCARPs areas, particularly, disastrous areas in the completed and under construction projects; and
- v) Survey and investigation of potable and irrigation water in the desert areas of the country.

In Punjab especially in Thal and Cholistan areas, extensive survey and detailed investigations are proposed for preparation of irrigation and drainage schemes. In Sindh, survey of arid zone of Thar, Kohistan, Nara and Nangar-Parkar areas will be continued. In NWFP, surveys for groundwater development in the barani area and development along the banks of stream/nallahs are proposed to be carried out. In Balochistan and FATA, investigation programme will be continued in different valleys and basins for surface and groundwater development.

Research

50. The broad areas of research on which attention will be given in the Eighth Plan are: (i) snow and ice hydrology in the upper catchment of Indus rivers system, (ii) dams and reservoirs related activities, (iii) river channels/diversion structures, (iv) conveyance system

below distributaries, (v) Watercourse command/farm managed system, (vi) effective utilization of land and water resources, and (vii) special studies like hill torrent management, promotion of water resources research in universities, strengthening of research institutes, rainfall harvesting, groundwater recharging through artificial methods and conjunctive use of flood and groundwater etc.

Financial Allocations

51. The total outlay for the Federal portion of Eighth Plan, amounting to Rs 55.569 billion has been worked out on the basis of throw-forward from the Seventh Plan amounting to Rs 43.973 billion required for completion of the ongoing projects and funds required for programmes of continuous nature like survey, investigation, research, flood control works and small irrigation projects for Special Areas. The bulk of federal share of Rs 38.997 billion goes to Drainage and Reclamation Programme (SCARPs) followed by Irrigation sub-sector for which Rs 13.483 billion have been proposed. Apart from these programmes Rs 2.390 billion have been earmarked for flood control/protection programme and Rs 0.693 billion for Planning and Investigation. Other major ongoing projects/programme like ISRP, OFWM and new irrigation projects to be implemented in the wake of Water Accord will be undertaken by the provincial governments. Detailed break-up of federal financial allocations may be seen at Statistical Appendix Table-III-2.4. Portfolio of projects with financial allocations is attached as Statistical Appendix Table-III-2.5.

III-3

MANUFACTURING

Objectives and Strategy

The Eighth Plan will use the manufacturing sector as a key vehicle of economic growth, employment generation, economic diversification, poverty alleviation and export acceleration. A growth rate of 9.9% per annum has been proposed for the manufacturing sector; large scale manufacturing is expected to grow by 10.5% and small scale by 8.4% per annum. The sector is likely to generate 680,000 additional jobs during the Eighth Plan.

2. Pakistan's industrial growth is cotton based. The relative factor endowment (namely availability of cheap cotton and labour) that dictated this trend will change overtime and the comparative advantage will move away from "land and resource - intensive products" to labour intensive products first and eventually to products embodying newer technologies and sophisticated skills and knowledge. The Eighth Plan intends to gear the industrialisation process on this path.
3. The main sectoral objective will be to expand the international competitiveness of the industry as rapidly as possible. For this purpose an outward looking strategy will be adopted which will facilitate export of manufactures, enable the market signals to guide efficient resource allocation in investment and employment to more productive business activities and induce technological development and productivity gains. Competitive pressures will be generated both on domestic and international fronts which would help improve efficiency and productivity. A liberal regulatory regime will be developed which allows free and easy entry and exit for firms to respond to changing market environment. Competitive pressures from international market will be brought about through changes in trade, tariff and foreign exchange regimes.
4. The following policy will be adopted to achieve these goals:
 - (i) **Planned Liberalization:** A conducive policy environment will be created where the private enterprise will have greater freedom and the state will only promote competition, intervene in favour of technology development, pollution control etc.
 - (ii) **Privatisation:** The policy of privatisation of public enterprises will be accelerated.
 - (iii) **Public Enterprise Reform:** A policy of public enterprise reform will be adopted to ensure that the public enterprises which are not privatized are properly managed.

(iv) Direct foreign investment would be encouraged to improve technology, marketing and product quality.

(v) Policy of public - private ownership will be followed to assist investment by small investors and to promote industrialisation of backward regions.

(vi) **Attention to the Social Context:** The Eighth Plan will develop a package of policies to ensure that the social consequences of industrialization (concentration of owner- ship, industrial relations, and income inequality) are managed in a socially acceptable and harmonious fashion. The policies for the dispersal of industries will be accelerated to achieve balanced industrial development in all regions, especially backward and rural areas.

(vii) **Capital Market Development:** A programme of capital market reform will be undertaken to ensure larger and broad based mobilisation of resources for industrial development.

(viii) **Environmental Aspects and Pollution Control:** The environmental problems that have arisen due to unintended side effects of development would be addressed through proper environmental planning. The emphasis would be on controlling and correcting industrial discharge of residues and wastes, handling of toxic chemicals etc. Environmental pollution control standards and criteria will be developed and enforced through the development of efficient regulatory mechanism, under the control of respective Provincial Governments Environment Protection Agencies (EPAs).

5. The proposed high industrial growth rate will be achieved by upgradation of technologies, modernization of industries, full utilization of existing capacities and setting up of new capacities and development of wide variety of technical management and operative skills. The resultant improvement in product quality and reduction in cost would not only stimulate domestic demand but would also enable industrial products to compete abroad particularly where comparative advantage exist. Above all, it would benefit the domestic consumer.

6. In this context following aspects will be stressed during the Eighth Plan:-

(i) **Restructuring of Industry:** The objective of sustained long term economic development will be achieved through planned and progressive restructuring of industry. In the evolution of an industrial structure capable of meeting domestic needs and competing in world market, high technology, high value added, labour intensive and knowledge based industries will receive priority. Fiscal, monetary and other incentives and concessions will be extended and external economies generated to encourage the private sector to come forward and invest in these areas.

As defence production involves application of sophisticated and modern technology, appropriate and suitable links will be forged between defence needs and industry.

- (ii) **Deregulation:** The major instruments of intervention such as industrial licensing, exchange control and other regulatory control have been dispensed with. The nature and quality of Government intervention will now be restricted to environmental aspects and pollution control, industrial safety and hygiene and to encourage investment into areas of national priority. Public sector will continue to provide infrastructural and institutional facilities, manpower training of managerial technical and operative skills, R & D, safety and pollution control. Government will encourage the Chamber of Commerce and Industries to develop sufficient expertise for the generation of private sector data base.
- (iii) **Location and Infrastructure:** Concerns relating to dispersal of industrial development will be mainly addressed by generating external economies by way of expanding infrastructural facilities and improving the quality and availability of the human resource. Small Industrial Estates will be established and the existing ones further strengthened particularly in less developed areas in collaboration with the private sector. Government would participate in providing basic infrastructure facilities i.e., roads, electricity, gas, telephone, water etc. and special incentives in the form of tax rebates, duty concessions on imported machinery to the investors in particular in Export Processing Zone, Special Industrial Zones and Industrial Estates. Export Processing Zones meant for attracting foreign capital, technology transfer, establishing export oriented industries, employment generation, foreign exchange earning through value addition have been and are being set up in the various parts of the country. Similarly Special Industrial Zones meant to export goods at least upto 60% of their weighted production capacity would be set up in consultation with provincial governments. Small Industrial Estates would be established particularly in less-developed areas in collaboration with the private sector.

The dispersal of industries and balanced regional growth is necessary not only from the point of view of balanced development regionally, but also for relief from the increasing pressure on land, civic facilities and transport in the urban centres. Efforts would be made to accelerate infrastructure and human resource development programmes in the backward areas, because industry will not be attracted to these areas on the mere strength of concessions.

- (iv) **Technology Transfer and Industrial R&D:** Pakistan needs modern technology to consolidate and upgrade the process of industrialization. To achieve technological competence, the following strategy on "Make-Some" - "Buy Some" will be adopted. The private sector will be further familiarised and encouraged to utilize government's programmes for the technical, financial and institutional support to develop Research and Development(R&D) efforts. It will also be encouraged to

undertake research and development on its own. Environmental Protection will be one of the key criteria in the selection and development of technology.

- (v) **Entrepreneurship Development:** For promotion of enterprise formation, institutes like IBA, LUMS would be encouraged and the existing ones will be strengthened to impart professional education to prospective entrepreneurs and managers. Special study programmes for the incumbent entrepreneurs, small manufacturing concern owners and industrialists may be arranged at these institutions.

Non-traditional entrepreneurs i.e. women, farmers will be given special attention to develop small handicraft and agro-based small industries.

- (vi) **Labour and Management:** The National Manpower Commission has recommended that the private sector should take the lead in vocational/technical training with the government, playing an active support role in developing a coordinated system of vocational training. The present apprenticeship training system needs to be revised and the new system may have to be designed in such a way that the class room training is complemented with on-the-job training. The government would strongly encourage the private sector to organize intensive in-plant training and to actively participate in the establishment and management of vocational training institutes. The trade unions will be induced to share the function of identifying training needs and priorities and the management of training programmes and training institutes.

The small scale/informal sector has a dynamic role to play in future economic development and will be the main source of employment for the growing labour force. There is therefore a need to train and strengthen the skills of those working in this sector. As a first step a comprehensive survey of this sector should be undertaken to chart levels and types of technology and identify training needs. There is a need for innovative training approaches in this field, including the use of mobile training units for short-term crash courses.

- (vii) **International Competitiveness:** Policies will be adopted to ensure competitive position for Pakistan exports in particular for value added items. Tariff structure of import regime will be rationalised with a view to reduce anti-export bias and encouraging investment in export industries. Exchange rate will also be adjusted with a view to maintaining and improving the competitive position of Pakistan manufacture in international market.

- (viii) **Small and Cottage Industries:** Small and cottage industries have large employment and income potential. Besides they also provide a basis for broadening and expanding savings and investment and dispersal of benefits of growth to less developed regions and poor section of the society. It is estimated that an investment of Rs.150 thousand in small industry creates one job as against Rs.3.5 million by large scale industry. Some specific steps to be taken for promotion of small scale industries are:-

- (a) wider dispersal of infrastructural facilities in particular energy and gas;
 - (b) promotion of small scale industrial estates;
 - (c) strengthening the role of Provincial small Industries Corporation as a promoter of private enterprise, disseminator of skills, provider of common facilities and facilitator of marketing;
 - (d) expansion of credit facilities;
 - (e) strengthening the Small Business Finance Corporation and encouraging the private sector to establish Small Industries Banks on the pattern of Development Finance Institutions.
- (ix) *Environment:* Natural environment has deteriorated particularly in Urban-Industrial agglomerations such as Karachi. This situation has occurred chiefly due to poor operation and maintenance of plants resulting in high levels of effluent per unit of production. Recently consciousness and awareness is gradually emerging of the environmental threats the country is facing and of the need to take preventive action rather than react by more costly ex-post damage control. It is increasingly being recognized that industrial growth needs to be ecologically sustainable in the long run.

Management Issues

7. In manufacturing, the Seventh Plan fell short of targets in various industries mainly due to law and order situation, infrastructural constraints, cost and time over runs, shortage, of power, under utilization of capacities production of high cost low quality products and non availability of critical inputs at competitive prices. These are the important weakness inherited that need to be tackled. As such attention has to be paid to productivity and efficiency through disciplined management of development programmes and policy initiatives. Development programmes will be mainly undertaken by the private sector. This would create an appropriate environment that would encourage and promote greater efficiency, higher productivity and further industrial growth in desired direction through a well co-ordinated system of incentives and in consonance with the said objectives and policy initiatives.

Consolidation and Rehabilitation

8. Confidence building measures by Government are needed to create a suitable investment climate. A set of incentives based on an attractive rate of return on capital may be designed in order to attract private investment in development of private industrial estates and infrastructure as business ventures. Government obligations for providing the necessary facilities in the small industrial Estates i.e., electricity, natural gas, telephone lines, roads, schools, hospitals etc., will be fulfilled and for this purpose the institutional framework may be reviewed and strengthened. Industrial estates will be made eligible for purchasing power generated by the private sector. Natural gas as base for power generation may also be included as a resource-based incentive to the private sector.

Allocations and Targets

9. To achieve the proposed growth rate of 9.9% per annum in the manufacturing sector an investment of Rs.367.1 billion is estimated which includes Rs.365.2 billion in the private sector. Industrial Production targets for the Eighth Five Year Plan (1993-98) are given at Statistical Appendix Table-III-3.1.

10. An investment outlay of Rs 1.86 billion has been projected for the manufacturing in public sector. A list of major programmes/projects in the federal public sector is given at Statistical Appendix Table-III-3.2

Sub-Sector Focus

Textile Industry

11. The textile and clothing industry is the most important sub-sector of manufacturing in Pakistan. On an average, it accounts for about 40 percent of employment, 60 percent of total export receipts and approximately 30 percent of value addition in manufacturing. The country is the world's largest exporter of cotton yarn and the third largest exporter of raw cotton. The textile industry, however, has remained globally insignificant as exporter of garments, indicating that most of the country's textile industry is concentrated in the preliminary stages of the processing chain. Large scale organized sector concentrates in spinning activities and a highly fragmented cottage/small-scale sector predominates the downstream, ranging from weaving to garment making. As a result of deregulation and other fiscal measures taken by the Government, the revitalization and investment efforts have brought the total installed capacity to 6.7 million spindles and 90,000 rotors. The un-organized small-scale units continue to generate the bulk of country's low value added grey cloth partly because of lack of institutional finance for modernization efforts. Garments exported are one of the lowest priced in the trade because of inconsistent quality of cloth, poor stitching and designing, lack of standardization, absence of quality controls and poor marketing. Thus despite the excellent cotton resource base, a strong spinning sector and impressive export performance in cotton yarn, the industry's structure remains unbalanced and concentrated in low-value products.

12. During the Eighth Plan, the emphasis would be on shifting the product line to higher value added. This approach would entail the development of the export oriented garment sector to act as a driving force for the balanced development of textile industry. In turn this would stimulate backward linkage within the industry and thereby accelerate upgrading of the upstream and mid-stream sectors. The finishing segment which is the weakest link in the textile chain would be given special attention. The power loom sector, the major source of cloth production, would be facilitated to improve quality.

13. Government support would be provided in the areas of modernization of facilities, productivity improvement, research and development for upgrading of more differentiated products, information collection (market research surveys of industries in competing countries, technological information) and sales promotion. The existing R&D and training institutions such as TIRDC, National College of Textile Engineering in Faisalabad and Government Weaving and

Finishing Centre Shahdara and polytechnic institutes at Karachi and Multan would be modernized and updated. Pursuant to the policy of encouraging the private sector activities, the All Pakistan Textile Mills Association (APTMA) and other associations of down stream textile industries would be encouraged to set up their own textile training institutions. Full and productive use of the recommendations of the study conducted by Japan International Cooperation Agency (JICA) would be made, wherever viable, for their implementation during the 8th Plan.

Leather and Leather Products

14. The leather and leather products industry is labour intensive (directly employing more than 200,000 workers), adds value to imported and domestically available raw materials, is regionally well dispersed and has become a substantial foreign exchange earner. Leather industry has made great progress during the last decade by successfully converting its operations from export of raw hides and skins and semi-processed leathers towards higher value added finished leathers and leather products such as leather garments, gloves, sports goods and other leather goods mainly through structural changes and large investments from the private sector.

15. There are over 400 tanneries in the country, most of them capable of producing good quality finished leather. The Government has provided various incentives which encouraged the tanning sector to invest on a large scale in applying the most advanced technology for producing high quality product. However pollution has been and still is the major problem of this industry that needs to be controlled by optimum use of chemicals, recycling and better utilization of solid and liquid wastes. There is need for strengthening the R&D activities in respect of raw materials, processing materials, machinery, utilization of bye-products, trained technical manpower and environmental pollution.

16. Footwear sub-sector is the main consumer of leather material. Approximately 80 percent of the leather footwear are made by small and cottage type units. Their performance is affected by the usage of un-suitable material and components, lack of standardization and design, pattern making and grading deficiencies. The medium scale footwear industries which are producing cheap grades of products and locally made components are facing problems of shortage of trained production supervisors and foremen.

17. The industry has a great export potential. Leather and leather goods industry would be developed with the use of sophisticated modern machinery, increase in productivity and Government support in providing fiscal, monetary and physical incentives. In this context, a comprehensive sectoral study would be carried out with the assistance of UNIDO.

Sugar

18. The demand of sugar is estimated to increase from around 2.5 million tons in 1993 to 3.4 million ton in 1998.

19. There are 61 sugar mills in operation in the country (Punjab 33, Sindh 22, NWFP 6) with a total installed capacity of about 2.40 million tons on the basis of 160 working days (October to March). 4.4 million tons per annum capacity required for the year 2000 and beyond have already been/or being created.

20. The country has the capacity to manufacture machinery and equipment of sugar plants upto the range of 70-75 percent in value terms, while the balance 25-30 percent is imported. The Eighth Plan envisages use of by-products, bagasse and molasses.

Fertilizers

21. The total fertilizer demand by the end of 8th Plan period (1993-98) as projected by National Commission on Agriculture is 3.091 million nutrient tons which include 2.148 million nutrient tons of nitrogenous fertilizers, 0.811 million nutrient tons of phosphatic fertilizers, 0.136 million nutrient tons of potassic fertilizers. The demand has been projected at an annual growth rate of 3.9 percent. The ratio among the nutrients (N:P:K) at the end of the 8th Plan (1993-98) is estimated to be (2.65:1.0:0.1.7).

22. The existing designed capacity of nitrogenous fertilizer is 1.123 million nutrient tons which will increase to 1.677 million tons by the end of the 8th Plan. The existing capacity of 0.1 million tons of phosphatic fertilizer will however remain unchanged during the eighth plan due to raw material constraints. The entire requirements of potassic fertilizers are being met through imports and no alternate local production is in sight by the end of the eighth plan merely due to non-availability of potassic raw materials. A deficit of all three macro nutrient, nitrogen, phosphorus, and potash exist and would require more straight nitrogen and mixed NP and NPK fertilizer facilities. To attract further private investment for the production of nitrogenous fertilizers, cheaper supply of gas based on thermal value may have to be provided.

Cement

23. The demand projections for cement by the end of the 8th Plan period (1992-98) is 13.207 million tons. The installed cement production capacity including the capacity under-implementation by the end of 8th Plan (1993-98) is estimated to 12.970 million tons showing an overall deficit of 0.238 million ton by the end 8th Plan. Additional capacity will be developed to fill this gap.

Engineering Industries

24. The Engineering Goods industry in Pakistan has grown sharply over the years since 1970. There has been a steady upward trend in the production of about all categories of engineering products: metal products, non-electrical machinery, electrical machinery, electronic and transport equipment. The range of engineering goods now being produced includes diesel engines, assembled cars, agricultural machinery, machine tools, textile machinery, household and industrial sewing machines, surgical instruments, radios, household appliances, road rollers, concrete mixers, bulldozers, sugar cane crushing machinery, overhead travelling cranes, pumps, printing and book binding machinery, office machines, oil expellers and other edible oil

extraction plants, flour/rice mills, fish trawlers, food processing machinery, cement plants, ice plants and cotton ginning plants. An important role in the development of engineering industries has been played by public sector corporations responsible for setting up of several large enterprises such as Pakistan Steel Mills, Heavy Mechanical Complex, Pakistan Machine Tool Factory etc. There are also a number of large foreign owned enterprises (in automobiles and electrical equipment specially) and a number of relatively small and medium sized engineering concerns in Pakistan.

25. Concurrent with the rising production trend in engineering goods, imports of capital goods is rising indicating setting up of new industries and or the modernization efforts in the existing industrial units.

26. However, in general, the levels of production efficiency and product quality in engineering industry are low. Manufacturing technologies currently in use are mostly suited only for production of simple components and shapes and of low precision products. Most complex and sophisticated products are confined to assembly operations depending heavily on imported parts and components. Sub-contracting is not carried out to a significant degree.

27. The weak performance of the country's engineering industry is reflected in its low and stagnant export performance. The only notable exception are surgical instruments.

28. The wide spread lack of sub-contracting and specialization is one of the major structural weaknesses of the country's engineering industries. There is, therefore, lack of backward linkages of large prime manufacturers with domestic supporting industries. The supporting industries are responsible for producing parts and components, machinery and equipment and industrial services in the form of design, training and quality control. The supporting industries contribute to reducing the import dependency, create employment, link large and medium sized companies through sub-contracting arrangements etc. However, the supporting industries are suffering from the various shortcomings such as shortage of trained skilled labour, deployment of outdated production technology, inadequate standardization and quality control facilities, limited knowledge in selecting and using appropriate materials and limited design and innovation skills to develop new products or adopt foreign designed products to the requirements of the domestic market.

29. To accelerate indigenisation efforts in a planned manner, the establishment of design and engineering centers is a pre-requisite. The involvement of consultancy and expertise cells needs to be made mandatory upon new entrepreneurs through legislative backing, in order to facilitate technological advances. Support for developing and augmenting the capabilities of the local manufacturers to achieve maximum deletion in engineering goods especially sugar, cement, chemical/petrochemical, fertilizer and thermal power plants, transport equipment, electrical goods, has to be ensured. Such agencies/centers must be set up and entrusted the job of developing know-how for indigenous designing and engineering of complete plants.

30. In the light of the above situation, the main thrust in the eighth plan will be towards facilitating the supporting industries, the removal of their short comings and difficulties and development of their abilities to absorb new technologies for upgradation of quality, product

design and cost competitiveness. At the same time substantial expansion of manufacturing capacity will be carried out in various industries.

Automotive Industry

31. The auto and allied industry, the barometer of economic health in industrialized countries, covers a broad range of engineering and industrial activity which on upstream includes steel - making including high grade alloys, Aluminum and other non-ferrous alloys, glass manufacture, plastic raw materials, chemicals including paints and lubricants and machine tool manufacture and on the ancillary sides foundries, forge shops, pressure and investment casting, precision machine shops, press works, plastic moulding, electrical and electronic equipments, rubber products, hydraulic and pneumatic engineering.

32. There are around twenty Auto Engineering and thousand of ancillary and vendor units that have been catering the requirements of the country's auto requirement. Pakistan is presently engaged in the manufacture/assembly of Cars, Trucks, Buses, Van/Pickups, Motorcycles, three Wheelers, 4-WD Vehicles and Tractors. In the automobile line, two units namely Pak-Suzuki, M/S Indus Motor have set up their units for local manufacture of cars of various range whereas two other units namely M/S Atlas Honda Motor and Ghandara Nissan are in the process of setting up automobile units. About 850 vendors are engaged in the manufacture of different parts/components for these vehicles employing over 100,000 persons directly and 300,000 indirectly.

33. The indigenisation process is proceeding satisfactorily in the automobile and the local content in the automotive vehicles range from 45% to 80% i.e. Trucks/Buses (45%), Motor Cars (47%), Motor Cycles (73%) and Tractors (80%).

34. At present, one vehicle is available for 200 persons. Two and a half decade later the target may be one vehicle for 50 persons. The market in that case will grow 10% a year and on average 500,000 vehicles should be added every year. During 8th Plan a rational tariff policy, indigenisation through vendor development and standards/quality control measure will be followed for the development of automotive sector to meet the future national demands.

Electronics & Electrical Appliances

35. Electronics is the key to industrial and economic development. It therefore qualifies as a strategic technology. The role of electronics in household, medicine and telecommunication sectors is ever increasing.

36. Keeping in view the importance of electronics technology, the Government of Pakistan in 1984 extended some fiscal and administrative concessions for Electronics Industry, but most of the concessions could not be availed due to anomalies faced at the implementation stages.

37. Existing Industrial Base in Private Sector is the entertainment electronics sector, which has remained confined to the assembly of mostly foreign patents of Radios, TV sets, Cassette Recorders and other allied consumer equipment. A considerable amount of local integration was

achieved by the formal sector but the basic electronics components, continued to be procured from abroad. The industry generally failed to establish itself on healthy lines and acquire any technological potential. Except that the needs of the country were met and some economic benefits in the form of saving of foreign exchange and creation of Industrial employment accrued due to the establishment of assembly plants.

38. The development of basic electronic and electrical appliances item continues to be far away from the reach of this country as the manufacture of such common items as TV receiving sets, tape/recorders, refrigerators, air-conditioners etc, depends heavily on, imported parts and components. Indigenisation of parts/components in refrigerators, deep-freezers and airconditioners have been attained to the extent of 65 per cent while the situation in respect of TV sets is achieved to the extent of 50 percent in the manufacture of black and white sets and 35 percent in colour sets. The deletion in the local manufacture of radio, tape recorders have reached 75 percent.

39. However, the country has inherent strength and the potential for future growth. Recognizing that electronics can make a very significant contribution towards improvement in productivity, the Eighth Plan envisages rapid introduction of electronics in almost all sectors of economy. Technical developments in almost all the industrial and service sectors will also require much greater application of electronic.

Chemicals

40. Chemical industry in Pakistan has generally remained subdued. Little inter-relation developed between individual projects for chemical sector and those in other industries. Stress has always been on import substitution small scale projects just meeting domestic requirements and were planned without considering their competitive capability.

41. Promotional stage of chemical industry is over and the industry is passing to the second stage where demand of some of the products is well established and minimum economy of scale can be achieved and for which a base of some skilled men and a few materials is also established. Typical examples are of Soda Ash, Sodium Bicarbonate, Sulphuric Acid, Caustic Soda, Polyester Fibers etc.

42. Products like citric Acid, Oxalic Acid, Mono-Soda. Glutamate etc. can be produced from Molasses. Production of PVC, Ethylene, Glycol, Polystyrene and Butadiene from Molasses/Alcohol could also be considered depending on various economic parameters.

Paper Industry

43. The major types of paper produced in Pakistan are writing/printing, wrapping and security paper. The average capacity utilization of paper mills in Pakistan is around 65%. The total paper demand by the end of Eighth Plan (1993-98) is 302,143 tonnes. The strategic issues include lack of technical skills, environmental concerns, lack of forests for wood pulp production, duties and taxes on imported items power failure and low volume units. Possibility of setting up bagasse based paper mills around the existing sugar mills would be studied.

Edible Oils

44. The vegetable ghee/cooking oil industry is the largest user of edible oils in Pakistan most of which is imported. In view of the large gap between demand and indigenous production of edible oils, efforts are needed to augment indigenous production. In this context, non-traditional oil seed production i.e. sun flower, soybean and safflower is being implemented through long term oil seed development programme. Modern and sophisticated technology has to be deployed for the extraction of oil through solvent extraction technology and production of vegetable ghee by replacing obsolete, redundant, second hand machinery with better machinery. A well knit integrated and cohesive strategy would be formulated for restructuring the edible oil and vegetable ghee industry taking into account: i) promoting and facilitating the development of both farming and processing of domestic non-traditional oil seeds; ii) fiscal and monetary incentives to encourage setting of oil solvent extraction units; iii) marketing strategy for the sale of sunflower meal to make solvent extraction unit as viable proposition; and iv) to adjust the sale price of vegetable ghee/cooking oil in such a manner so as to discourage its smuggling to neighbouring countries

Medium Small and Micro Enterprises

45. The spectrum of industries in the country extends from organized, large and medium industries to small scale industries and unorganised traditional industries. The last two, known as the micro/cottage and small scale industries constitute an important segment of the economy. It provides maximum employment, next only to agriculture sector and accounts for substantial export of the country. The growth in this sector has a preponderance of self employment, results in wider dispersal of industrial and economic activities and ensures maximum utilization of local resources, both men and material.

46. Traditionally, SMEs have specialised in processing local raw materials, such as cotton, and food processing, wood and furniture and construction materials. Other key activities are focussed on exports that add value to imported raw materials, including manufacturing of carpets, ready made garments, sports goods, cutlery and surgical instruments.

47. Agro-industries, selected textile products and light engineering are expected to continue being growth areas in the medium terms. In the recent past, agro-industries accounted for about 30 per cent of SME investments. The importance of this sub-sector is likely to increase, as sustained expansion in farm output generates larger agricultural surpluses for processing. Substantial capacity expansion is expected in rice and flour milling, oil extraction and ice and cold storage for the fishing, poultry and cash crop sectors. Also, projected opportunities in the handling, storage and processing of fruits and vegetables for domestic and export markets could be numerous, growth in the powerloom sector, which accounted for about 15 percent of past SME investments, is projected to continue in response to expanding domestic demand for fabrics, particularly in catering to rural requirements.

48. In the past, SME production for exports concentrated on traditional products such as cotton yarn, cotton cloth, carpets, sports goods and surgical instruments which were exported mainly to Europe. More recently, however, there has been market diversification, demonstrated

by exports of leather products, garments, textile made ups, and processed marine products, fruits, and vegetables to newer markets including North America. The outlook for further growth appears promising.

49. Promotion of small and micro industries falls within the responsibility of provincial Governments including Government of AJ&K. The Federal Government supplements and wherever necessary co-ordinate the efforts. Technical assistance activities are mainly a provincial government responsibility, carried out by semi-autonomous provincial agencies, known as the Small Industries Corporations (SICs), focusing their assistance on providing physical facilities, developing industrial estates, building and equipping service centres and establishing training and production centres for handicrafts.

50. The growth and development of this sector had been and still is being constrained by several factors including lack of the entrepreneurial, managerial and technical skills, finances and marketing abilities, industrial policy being bias towards large scale enterprises, deficiency in quality control, lack of infrastructure, training and organisation. All these constraints have resulted in placing this sector at a disadvantage vis-a-vis the large industries.

51. In order to remove the constraints that impede the growth of this sector, necessary strategy covering, but not limited to the following would be pursued.

- i. rationalization of fiscal regime to ensure its rapid growth;
- ii. Improving productivity and enhancing quality and standards through training in vocational and technical skills and upgradation of technology and modernization;
- iii. Strengthen the programmes of improving linkages between large and small industries leading to harmonious growth of the total industrial sector;
- iv. Establishment of common facility and service centres for the provision of necessary inputs: equipment, raw materials, technical services, information regarding input and output markets, credit etc. preferably in close proximity to, or among the cluster of small and micro enterprises through autonomous and decentralized agency/private sector.
- v. Provision of infrastructure and transport facilities for setting up small scale industries in no-industry/backward areas to remove regional imbalances.

III-4

MINERALS

Objectives and Strategy

The mineral sector has considerable potential, yet its role in the economy of Pakistan has remained deficient. As mineral resources can play a vital role in the exploitation of national endowment the Eighth Five Year Plan (1993-98), calls for enlarging the role of this sector in the economy of the country. Minerals, being non-renewable resources, require special attention so that these are exploited and utilized in an optimal manner. The role of geological mapping, mineral prospecting, exploration, mining and utilization is of special importance.

2. The Eighth Plan envisages vigorous and sustained efforts for the discovery and exploration of mineral deposits and scientifically planned management of mineral resources. In this context emphasis will be given to:-

- i) Speedy completion of geological mapping of the mineralized areas of the country;
- ii) adoption of modern exploration techniques to discover new deposits;
- iii) intensification of detailed exploration and evaluation in the known mineralized zones to delineate their extension both laterally and at depth;
- iv) strengthening of multi-disciplinary approach to mineral exploration using photogeology, satellite imagery, geophysics, geochemistry and drilling;
- v) improvement in the preparation of geologic models which would lead to a better understanding of the genesis of the mineral resources;
- vi) improvement and clarity in regulatory and fiscal regime for mining investment;
- vii) Privatization of Public Sector Mines;
- viii) Acquisition of modern foreign technology by encouraging Foreign Direct Investment of the firms experienced in the mining technologies; and
- ix) monitoring of implementation of environmental protective measures.

3. The major priority areas in the Eighth Plan are:-

- i) The National Mineral Development Policy will be announced for which an Action Plan will be prepared in consultation with the relevant federal

Ministries, provincial Governments, banks and international donor agencies.

- ii) The Geological Survey of Pakistan (GSP) would set up an Economic Evaluation Division to generate and interpret geo- scientific and test mining data on areas of economic interest for the preparation and dissemination of feasibility reports.
- iii) The selection of Areas to be included in the GSP programme would be undertaken in consultation with provincial Governments in accordance with the spirit of the National Mineral Development Policy and other reports prepared by local and foreign consultants. The identification of areas would be prioritized as under:-
 - a) mainly such minerals which have a good chance of being exported as well as assumed to be attractive for prospective investors;
 - b) Secondly such minerals which might be produced and consumed locally, thereby replacing imports; and
 - c) finally general production potential of minerals used and available locally.
- iv) GSP would prepare and publish Economic evaluation Reports on areas of economic interest covering succeeding smaller areas from regions to mineral bearing tracts of such size which are suitable for commercial exploration ventures.
- v) Provincial Governments may tender out prospective areas to the private sector based on the feasibility reports issued by GSP and also provide services and equipment on reasonable charges to the Private Sector.
- vi) Mineral Concession rules would be made development oriented, transparent and firm by streamlining the procedures, reduction of administrative discretion, deleting the anti-commercial provisions and other conditionalities that curb the developmental activities.
- vii) A package of fiscal incentives regarding exemption from levy of custom duty on import of mining machinery, import permit fee, tax holidays, export finance scheme at concessionary mark-up rate and provision of soft term line of credit to Regional Development Finance Corporation would be introduced considering its complex, risky, capital intensive and heterogeneous nature and long gestation period.
- viii) Provision of technology and technical services to small scale mine operators will be institutionalized.

- ix) The National Centre for Technology Transfer would be utilized for obtaining information and advisory services in the selection, acquisition, adoption and absorption of technology to the mineral sector and end-user service for negotiation and joint venture agreements.
- x) To encourage mineral based industries and the projects which have export or import substitution, the provincial governments will give priority to lease applications for mining.
- xi) Government will set up a service under an appropriate agency for low cost rapid mineral analysis and beneficiation testing for the benefit of private mine owners.
- xii) Equipment renting and leasing enterprises will be established to promote mechanization in the mining sector.
- xiii) Training facilities will be enhanced for producing trained specialists and middle line supervisors in all geo-scientific disciplines
- xiv) Foreign investment in the mineral sector will be encouraged.
- xv) Public Sector projects which are in production or close to it will be transferred to private sector gradually and in phases.
- xvi) Mining projects will qualify for foreign supplier credits for purchase of mining equipment against guarantee of federal Government subject to insurance of specified risks.
- xvii) Financing of mining project will be through escrow accounts. Possibility of using Mining lease and mineral reserves as guarantee for the extension of loan/credit depending upon the risk of the stage at which loan is required would be investigated.
- xviii) Creation of special exploration fund for financial assistance to companies engaged in prospecting/exploration in priority areas will be investigated.
- xix) Creation of conditions and environment conducive to private sector investment; and
- xx) Conservation of mineral resources and protection of environment would be an important obligation of investors in mining project.

Management Issues

4. Although adequate mineralization prospects are expected in Pakistan as is evident from its geological set up, yet its contribution to economy is merely 1% of GNP. It is mainly due to

the nature of this industry which is extraordinarily complex involving long gestion periods, heavy costs and high risks. Other problems being faced by the Mineral Sector are insufficient geological mapping, inadequate R&D facilities, lack of equipment and infrastructure, non-availability of risk capital etc. In order to resolve these problems, National Mineral Development Policy and Action Plan will be formulated by the Ministry of Petroleum and Natural Resources in consultation with the relevant Federal Ministries, Provincial Governments and Private sector. Implementation of proposed Action Plan will create an appropriate environment that would encourage both the public and Private sector to take active part in the identification, exploitation and processing of the mineral resources.

Resource Base

5. Even though the geological survey of the country is inadequate, considerable work has been in identification of mineral zones, which envelop most important mineral occurrences and potential of the country. As a result of detailed geo-technical investigations, the group of minerals for which the country can be considered self sufficient are: rock salt, gypsum, baryte, marble, onyx, soapstone, silica sand, limestone, dolomite and ornamental stones. Mineral deposits which are promising and merit detailed go-scientific studies for determining their economic viability and appears to have sizeable geological reserves include: copper, gold, silver, antimony, chromite, platinum and platinum group, iron ores, zinc, lead, magnesite, bauxite, fluorite, tungstone, lithium, gemstones, rare earths, gold in mother rock in the beds of Indus river and its tributaries.

Mineral Development in the Private Sector

6. Private sector involvement in mineral development is minimal. Private mining enterprises are small units, ill organized, fragmented and wasteful in their methods. They are extracting most of the deposits of non-metallic nature that occur on or near the surface through either open pits or underground mining to shallow depths. Most of these operations are confined to outcrop working and are abandoned when their limits are reached. Yet, their contribution in volume terms is substantial.

7. Despite these limitations the private sector has the potential to make a major contribution to the mineral sector provided appropriate institutional arrangements and facilities are created. Various physical facilities such as availability of geological maps, exploration and evaluation data, techno-economic information on various aspects of mining are available from the Geo-Data Centre of the GSP. Furthermore, chemical analysis, mineralogical tests, and material beneficiation are provided through the laboratories of PCSIR, RDC, technical organizations, and academic institutions. Additionally, extensive efforts will be made during the Eighth Plan to support the private entrepreneur to modernize and balance his operations.

Infrastructure Facility

8. In Pakistan, economically viable minerals are found in inhospitable, underdeveloped, and under populated areas with little communication, power or water supply. Saindak copper ore, Nokkundi iron ore and Hazara Phosphate rock are a few examples. The costs of building the

infrastructure are so high that even major projects cannot absorb them. During the Eighth Plan, the Federal and Provincial governments will provide the infrastructure in the mining areas on a priority basis.

Foreign Direct Investment

9. The acquisition of technology and expertise by Pakistan and foreign participation in the mining sector has to be considered within an overall framework of National Mineral Policy and Foreign Private Investment Policy. The policy should attract such private foreign investment/joint ventures which ensure acquisition of latest technology for mineral sector development.

Landmarks of Eighth Plan

10. The following key programmes/projects in the Public Sector will be undertaken during the 8th Plan period:-

Geological Surveys

In addition to regional geological mapping to the scale of 1:50,000, Geological survey of Pakistan (GSP) would undertake the tasks of prospection and primary exploration in the following metallogenic zones selected for 10 year National Mineral Exploration Programme by mineral consultants M/s GMBH of German hired by the Asian Development Bank.

Area-1. *Chilas Ultramafic-Mafic Rock Complex - Northern Areas*

The Chilas rock body with indications of Platinum, Platinum-group elements and chromite occurrences belongs to the largest basic intrusions in the world which are continuously exposed. It is approximately 300 Km long between Nanga Parbat in the east and the Dir District in the West. It is considered as the root zone of the Kohistan Island Arc with its deepest part in the Chilas area.

Area-2. *Jijal Ultramafic-Mafic Rock Complex - NWFP*

The Jijal rock complex with also indications of Platinum, Platinum-group elements and chromite occurrences is well exposed between Jijal and Patan, Allai Kohistan. It covers about 200 Sq. Km. It represents an up thrust rock complex against rocks of the Indo-Pakistan Plate to the south.

Area-3. ***Sakhakot Qila Ultramafic-Mafic Rock Complex (Dargai Complex) - NWFP***

This rock complex is situated in Malakand Agency, west of Dargai. It is about 26 Km long and 3 Km to 6 Km wide. It bears chromite, Platinum and Platinum-group elements. The area for detailed investigations covers approximately 200 Sq. Km.

Area-4. ***Polymetallic Mineralization Chitral, Verit (Awerith)***

The Center of this area is located about 25 Km north of Chitral, within a cluster of gold, Silver, copper lead, antimony, and strontium occurrences/deposits. Approximately 160 Sq. Km are selected for detailed investigations.

Area-5. ***Polymetallic Mineralization Chitral, Drosh - NWFP***

The center of the Drosh area lies 25 SSW of Chitral. This area has been identified for detailed investigations containing cluster of copper, lead and antimony which covers approximately 160 sq. kms.

Area-6. ***Ophiolite Belt, Jurassic Mineralized Carbonates and Tertiary Sediments, Bela-Duddar-Kundi - Balochistan***

The area with Copper, Lead, Silver, Zinc, Chromite, barite, magnesite, talc bauxite and low-grade phosphates occurrences or deposits covers more than 12,000 Sq. Km. Out of these, about 4,000 Sq. Kms have been selected for detailed investigations.

Area-7. ***Jurassic Mineralized Carbonates, Khuzdar - Balochistan***

Out of the area of more than 16,000 Sq. Km with Lead, Silver, Zinc, Barite and Iron mineralization, about 2,000 Sq. Km. have been selected for detailed investigations.

Area-8. ***Igneous-Contact Metasomatic Gold-Bearing Iron Ore, Chiniot-Bangla - Punjab***

The area comprises about 300 Sq. Km covering parts of Sargodha Ridge where Precambrian rocks of the Indian Shield are exposed which contains iron/gold mineralisation.

Area-9. ***Chagai Magmatic Arc, Chagai-Dalbandin-Raskoh - Balochistan***

Out of the area of about 10,500 Sq. Km with Copper, Iron, Gold, vermiculite and only marble deposits or occurrences, approximately 5,000 sq. Km have been selected for detailed investigations.

Area-10. *Saindak Porphyry Area, Saindak-Mashki Chah-Nokkundi - Balochistan*

This area comprises about 15,000 sq. km, with deposits or occurrences of Iron, Gold, Silver, Copper, molybdenum and onyx marble. About 6,000 sq. km are chosen for detailed investigations.

Area-11. *Ultramafic-Mafic-Basalt Rock Complex, Muslimbagh-Zhob Valley - Balochistan*

This rock complex covers nearly 3,200 Sq. Km between Khanozai in the south and Fort Sandeman in the north, centered near Muslimbagh. The area for detailed investigations of Platinum, Chromite, magnesite, talc, vermiculite) covers about 1,600 Sq. Km.

Area-12. *Precambrian-Paleozoic Tertiary, Abbottabad, Mansehra; Muzaffarabad - NWFP, AJ&K*

Occurrences of gold, silver, copper, lead and iron mineralization and deposits of phosphate, magnesite, talc, glass sand and bauxite are known. The area for detailed investigation covers about 400 Sq. Km.

Area-13. *Suture Associated Gemstone Zone, Swat - NWFP*

The area is associated with the Indus suture zone, marked by the Main Mantle Thrust in Swat District. The area covers 250 Sq. Kms. for detailed investigation along the emerald-bearing belt of talc-chlorite schists.

Area-14. *Suture Associated Gemstone Zone, Hunza - Northern Areas*

The zone is marked by the Main Karakoram Thrust and extends for more than 100 Km from the Hunza valley to Ish-Ko-man. About 350 Sq. Kms are selected for detailed investigations along the small, ruby-bearing marble zone.

11. GSP will also provide specialized services to the private sector on contract basis.

12. Pakistan Mineral Development Corporation (PMDC) would continue to operate public salt mines in the salt range (Punjab) and in the Kohat District (NWFP). In the Lasbela District, Balochistan, PMDC in Cooperation with United Nations Department of Economic and Social Development (UNDESD) is and shall continue investigating the presence of Zinc and Lead mineralization, of several meter thickness containing about 15.5% Zinc and 3% lead by geotechnical surveys and grid drilling. In the Gilgit region (Northern Areas) and Chitral region (NWFP), gold exploration based on modern concepts and techniques, supported by the Government of Australia will continue.

13. Gemstone Corporation of Pakistan has been and still is carrying out the prospection, exploration and development of gemstone areas with emeralds, rubies, topaz, beryl in NWFP

and Gilgit agency. However, its activities are restricted to the emerald exploitation in the mines in Mingora and Gujarkili (Swat District, NWFP).

14. Resource Development Corporation has been established to explore and develop the porphyry type copper deposits in Saindak area, Chagai District, Balochistan. Actual construction work for the mine, infrastructure and utilities is underway. The project is a Pakistan Chinese Cooperation with equipment and services being supplied from China, on a credit basis, to be repaid by blister copper, produced from the same project. The total investment is planned to Rs 11.19 billion with Foreign exchange component of Rs 6.22 billion.

Special Areas

FATA, NA and AJ&K

15. Federally Administered Tribal Areas Development Corporation (FATADC) would continue to complete its ongoing approved projects such as Marble quarrying in Khyber Agency, exploration of copper and manganese in North Waziristan, Chromite in Bajaur Agency etc.

16. In the Northern Areas exploration and evaluation of economic mineral resources particularly of gold with the collaboration of Australian Government and PMDC would continue.

17. Based on the Mineral Sectoral study carried out by the International Mining consultants, Azad Kashmir Mineral and Industrial Development Corporation (AKMIDC) will concentrate in the development of the following seven projects, the portfolios of which have been prepared. (i) Dhanwan Bauxite and Fireclay Deposits, Kotli Area, (ii) Marble Quarry in Nauseri Area; (iii) Dimension stone industry in Kotli Area; (iv) Kamroti (Gala) Dolomite Deposit, Kotli Area; (v) Tarli Domel Graphite Deposit, Kel Area; (vi) Shawai Gypsum Deposit, Muzaffarabad Area, and (vii), Batmang Limestone Deposit, Muzaffarabad Area. Further geological and geo-chemical exploration work, small scale mining of ruby and mining of Pegmatites initiated by UNDESD would continue.

Provincial

Punjab Minerals Development Corporation

18. In addition to developing Salt Mines in the Salt Range Areas, PUNJMIN would establish Fuller's earth activation plant, explore iron ore deposits in Chiniot area, evaluate Dhariala Potash Brine deposits in District Chakwal and also explore and evaluate other industrial minerals in the Kala Chitta Range and Murree Hills.

Sindh

19. Mineral identification and evaluation study of Industrial rocks and Minerals found in Dadu and Tharparkar Districts would continue. The Industrial minerals, if economically established would meet the ever growing demand of glass, chemical and steel industries.

Sarhad Development Authority

20. Sarhad Development Authority (SDA) would concentrate its activities for the exploration and development of following minerals/projects.

21. Rock Phosphate of Kakul and Lagarban- Tarnawai areas to supply its products to SSP factory of NFC at Haripur; Nepheline syenite of Koga, Mardan area for its utilization as a raw material for glass and ceramic industry; lead-zinc deposits of Besham, Kohistan; boulangerite with gold and silver contents in Chitral area being explored with the support of the Australian government and in co-operation with PMDC, Scheelite at Garam Chashma, Copper -silver at Drosh, Chromite of Malakand and Carbonatites for Phosphate, Iron, vermiculite, zirconium and rare earths.

Baluchistan Development Authority

22. Baluchistan Development Authority (BDA) would undertake the following projects:-

23. Zinc-lead deposits of Gunga, west of Khuzdar, vermiculite of Doki River near Dalbandin, bauxite and fluorite near Dalbandin, quartzite in Lasbela area and sulphur in Nokkundi region. Furthermore BDA in collaboration with BHP-UTAH would undertake prospection, exploration and development of gold and associated minerals in Chagai Hills and Siah-Reg areas in Balochistan.

Targets & Allocation

24. The total public sector investment programme in the mineral sector during the Eighth Plan is envisaged to be Rs 7.196 billion consisting of Rs 6.63 billion for Federal Programme and Rs 0.57 billion for Provincial Programme. The details of financial outlays and physical targets are given in Statistical Appendix Tables-III-4.1 & 4.2 respectively.

III-5

SCIENCE AND TECHNOLOGY

Introduction

The contribution of science and technology to economic growth is now widely recognised. It has been estimated that during the period 1950-90 technology alone was responsible for 90% of the increase of national income in developed countries. Growth based on technology was slow in the case of countries that pioneered the technological revolution but it accelerated in the case of late comers. However, this happened only because the late comers like Japan and recently Korea and Taiwan provided the national will and a sustained policy for assimilation of technology and earmarked the resources to learn new techniques, adapt them locally and based their growth increasingly on technologies.

2. The corner stone on which the edifice of the development programmes of a country must be built is its expertise in science & technology and its utilization in industry. The less developed countries suffer from a shocking lack of realization of this fact. To develop the expertise for indigenous high level research and to take it to the stage of commercialization is a demanding task. The road to self reliance has many hurdles but there are ample rewards for those who arrive. The need of the hour is to integrate science & technology in the process of economic planning. At the same time the existing science & technology infrastructure in the major sectors must be modernised particularly in industry, transportation & communication, energy, health, agriculture and water.

Eighth Plan Strategies and Initiatives

3. The most important 8th plan objective is the development of preconditions so that expertise will be built for indigenous high level research suitable for commercialization. There will be a clear effort to allocate increasing proportion of national resources towards science and technology raising it to 1% of GNP in the closing year of the Plan.

i) ***Demand Oriented Research and Commercialization of the R&D Results:*** Government alone cannot be expected to fully finance the R&D from its own resources. The private sector which is the ultimate beneficiary, should also come forward and share the financial burden. They should select problems of immediate interest and provide finances required for execution of research on those projects. Private sector will be encouraged to initiate joint venture projects between potential R&D companies, public sector R&D organizations and industry. The industrial units/groups of industries will be pursued to establish inhouse research laboratories and initiate R&D projects. Research & Development programmes in public sector institutes, will be evaluated against commercial criteria. Financial incentives, linked to market success, will be provided to institutions, departments and individuals involved in R&D projects. Steps will be taken to foster private investment in product oriented research and development. Government research and development programmes will endeavor to subcontract project components to private sector. R&D institutes must however, develop strong linkages with firms and direct its R&D efforts towards market requirements. The research and development institutes in the public sector will achieve at least 30% of self-

generation of resources through contract research, licensing of processes and products by the end of plan period.

ii) **Equity Participation by Government in Joint Ventures:** Technology fueled industrialization largely depends on acquisition, assimilation and development of technology for improvement of economic productivity. It requires ability to assess the appropriateness of the technologies because these are constantly changing which calls for improvement and up keeping with the new developments. There is a need to seed new technologies in the country because the private sector is not very much familiar with such technologies like renewable energy, electronics, new materials, biotechnology, computronics. The commercial introduction of these technologies would require special dispensation in the form of equity participation and protective tariff to save infant industry from foreign competition for a specified period. Ministry of Science and Technology alongwith the Ministry of Industries will identify such new technology projects, collaborate with interested entrepreneurs and recommend the special dispensation and other incentives.

iii) **Science Education:** Science and Technology requires a large overall educational base. At the same time there has to be a relationship between the allocation of resources to education and the part earmarked for science education. According to international standard recommended for developing countries, at least 15% of the educational budget should go toward science education. This goal should be achieved in the earlier years of the plan period. It should be a clear goal to separate science education at the graduate level from the science education at the intermediate level. Quality education in science has suffered because of mixing intermediate with graduate and post-graduate science education.

iv) **Science & Technology Manpower:** The Human Resource Development Programme (HRD) of the Ministry of Science and Technology has already evolved into a powerful link between the latest developments in the field of science and technology abroad with local institutions. The programme should be modified to;

- i) reduce cost on foreign training;
- ii) improve selection procedure;
- iii) achieve greater number of countries to which scholars are to be sent instead of concentrating on only few English speaking countries;
- iv) involve selected local universities through split Ph.D. programme in which most of the work is done in Pakistan and the scholar has to work for a year or less abroad;
- v) ensure better absorption of scholars; and
- vi) develop a national testing system for science subjects based on objective tests.
- vii) reduce dependence on foreign training in S&T by establishing University of Science and Technology

v) **New Technology Projects:** A number of new technologies especially in the field of renewable energy, electronics, new materials and biotechnology can be introduced in the country commercially but would need special dispensation for 5-10 years. Ministry of Science and Technology alongwith the Ministry of Industries will identify such new technology projects, collaborate with interested entrepreneurs and recommend the special dispensation including tax and other financial benefits necessary for introduction of such high tech projects in the country. At the same time local contribution will be stimulated in the same fields inspite of any protection given during infancy. The period of special incentives will be predetermined so that it is phased out.

vi) **Strengthening of R&D Institutes:** Science & Technology has remained low priority area in the overall strategy of development. This resulted in continuous widening of the gap between us and the technologically advanced countries. In Pakistan, some of the best equipped R&D organizations like PCSIR, Pakistan Atomic Energy Commission, SUPARCO and PARC have done some remarkable work while, other organizations like PCAT, NIO, NIE, PCRWR, CWHR, NIBGE, CAMB, HDIP, NIH have reached their take-off in various applied research areas. National Commission on Science & Technology (NCST) has been constituted to formulate a coordination mechanism between S&T organizations, production sector, provincial S&T Organizations, and to improve the system of dissemination of scientific information system. The strengthening of R&D system should be followed by dissemination of R&D information for utilization of the results. There is also a clear requirement of a monitoring, inspection and evaluation system for all R&D organizations. Such a system of evaluation and accountability must include, "Peer Review" and will lead to greater credibility and result in effective upgradation of research work. The over-riding goals will be demand-driven research through research contracts from industry.

vii) **Investment by Private Sector in R&D:** An important goal during 8th Plan period is to promote research and development in the private sector. This will require close interaction with various industrial sectors. Research funds will be created on a similar pattern as already achieved in the case of pharmaceutical and leather industry. Rules and procedures will be framed by Ministry of Science & Technology to ensure optimum utilization of such research funds leaving the final decision making, about specific research projects, to the representatives of the industry concerned. Ministry of Science & Technology will play a catalytic role in this regard to bring all the interested entrepreneurs together and agree to research levies on their turnover.

viii) **Transfer of Technology:** In addition to indigenous development of technology, its transfer will be encouraged by all means including its purchase from abroad. Necessary infrastructure will be made available in the country for adopting the techniques of reverse engineering on the "buy some and make some" approach, so that the rate of growth becomes much faster. A National Technology Development Plan will be prepared to assist such techniques which result in establishment of a strong technological base in the country.

ix) **Water and Agriculture Research:** Agriculture is the mainstay of Pakistan's economy. However, it cannot be made sustainable without optimal use of available land and water resources by means of crop zoning, conjunctive use of surface and ground water, application of high efficiency irrigation techniques, and, by growing low evapotranspirative high yielding

crop varieties. Instead of the traditional approach of handling agricultural and water sector's in isolation, 8th Plan would look at the full spectrum of agriculture and water aspects into sharper focus at future planning. The research efforts would be directed to issues which have definite relevance to farmer problems and conditions. In order to achieve tangible results, high degree of collaboration amongst various institutions at the provincial and federal level is the cardinal approach of this plan which could be strengthened by inter-institutional as well as intra-institutional coordination by formulating interdisciplinary teams and expert groups. A suitable agency like National Documentation Library and Information Network (NADLIN) would be recognized to disseminate the generated knowledge in various end-user organizations.

The 8th Five Year Plan focuses on its short term as well as long term impacts on national economy. It encourages use of computers to develop locally tailored simulation models for correct analysis of rainfall run off relationship, crop and micro environmental interactions, chemical application and water resources pollution concerns, so as to realize maximum benefits from investments into agriculture and water sectors.

x) **Technology Training Centre (Techtown):** Electronics industry occupies a position of a premier mover in the process of industrialization. No worthwhile industrial progress can be attained without the development of electronics and other hightech industries. A nation that embraces electronics, takes a short cut to modern age, as Hong Kong, South Korea and Singapore did. There is no reason that Pakistan cannot take rapid steps towards industrialization based on electronics. A Techtown has been planned to raise the level of the technology in the local industries to produce electronic products. Duty free import facilities within the Town will be extended.

Small and medium enterprises are extremely important for development of the electronics industry in Pakistan. Such manufacturers will be recognized although they are working currently in the un-recognized sector. Their problems will be properly studied by the National Electronic Commission and obstacles in the path of electronics growth removed.

xi) **Industrial Estates:** Planning of industrial estates all over the country is an urgent requirement for growth of industry in general and technology based enterprises in particular. Industrial estates will be planned throughout the Plan period to meet with the unsatisfied demand. The Tech-Town scheme of Ministry of Science and Technology will be completed during the first quarter of the 8th Five Year Plan. A study will also be carried out by the Ministry of Science and Technology in collaboration with the Ministry of Water and Power to examine whether stand-by electric power generation for the industrial estate can be achieved on economical basis by associating the private sector.

xii) **Energy Gap and Introduction of New Technologies:** The country suffers from severe energy deficits despite very low energy consumption of 0.25 tonnes of oil equivalent (TOE) per capita per year. Electricity shortages are estimated to have resulted in reduction of annual GDP by about 2% while the imports of crude oil and petroleum products have consumed some 24% of national export earnings during the 7th Plan period. More than 75% of the primary commercial energy in Pakistan is provided by hydrocarbons (oil and gas). The country is self-sufficient in gas but the indigenous production of oil meets only 25 to 30%

of national requirement. During the 8th plan, research efforts by the Hydrocarbon Development Institute of Pakistan (HDIP) will be strengthened for harnessing the untapped resources of hydrocarbons.

Energy conservation efforts of the National Energy Conservation Centre (ENERCON) will be promoted for using latest energy conservation technologies in industrial, transport, agriculture, commercial and residential sectors. Technologies like Compressed Natural Gas (CNG), solar energy, microhydro power, wind energy will be encouraged. An attempt will be made during the 8th Plan to introduce new technologies like "electric power generation based on solar bowl" and "electric power based on internal combustion engines" at suitable locations. WAPDA and Ministry of Science and Technology could collaborate on such technologies and their exploitation started. The efforts of PCSIR in using indigenous coal for making briquettes for domestic use, especially in areas not served by gas network, will be extended from pilot studies to commercial production. The energy sector R&D efforts during the 8th Plan will, therefore, endeavor to find additional resources of indigenous energy supplies and reduce imports.

xiii) **Antarctic Research:** Pakistan attracted a lot of attention in scientific circle, after the first Antarctica expedition and set-up of Jinnah Research Station on the continent. There can be considerable scientific and industrial fall out from Antarctic research. A sustained effort will be required because Antarctic research cannot be a one time affair. During the 8th Plan, Pakistan must follow up the initial effort by sending a research expedition once every two years. Thus three expeditions should be planned during the 8th Five Year Plan.

xiv) **Quality Control and Assurance:** Unless quality control and standards can be introduced and enforced, the competitive edge in the international market cannot be achieved. Such standards and their enforcement creates the need for using the latest technologies. Ministry of Science and Technology and Ministry of Industries will collaborate to evolve and enforce quality standards.

Management Constraints and Issues

a) **Monitoring, Evaluation and Accountability in R&D Institutions/System:** There has been continuing proliferation of small and fragmented research institutions and R&D projects. This has resulted in thinning out of R&D resources, leading to their ineffectiveness and duplication of activities. There is no institutionalized system for effective monitoring and dissemination of their output. Also there is no system of accountability of most of R&D institutes, specially in terms of commercial and economic viability of their output or optimum use of their resources. There is no management information system to give upto-date information about overall inventory of R&D activities taking place in the country. Effective institutional framework would be devised for monitoring and evaluation of R&D activities (including a system of accountability) and dissemination of their output for entrepreneurial or industrial commercialization. National Commission for Science & Technology (NCST) would be required to take a decision that further proliferation of non-cost-effective R&D institutions and projects will not be allowed because fragmentation of R&D activities /projects has resulted in thinning out of resources, and resulted in the ineffectiveness of the programmes. Non-productive institutions/ projects would either be abandoned or integrated with other

productive institutions of the relevant field. (For example, National Institute of Silicon Technology and National Institute of Electronics can be integrated to become productive). New organizations would only be established after ensuring that the proposed activities cannot be undertaken by the existing agencies or institutions, and ensuring availability of adequate resources.

b) ***Co-ordination and Integration of R&D Activities of Universities and R&D Institutions:*** Universities are the fountain-head of scientific research and development. In Pakistan the contribution of universities in R&D has been minimal. The meager research work carried out in our universities is rarely linked to the country's needs or to the production sector. Also there are no strong linkages between the R&D carried out in universities and other institutions. The R&D of universities would be closely linked with the specialized research establishments and the production sector, and be specially geared to generate improved production technologies. They would also develop strong extension education programmes to move new improved technologies to the farms and factories. Special measures would also be taken to encourage contract research in technical universities. This is extremely important not only for generating revenues but also for ensuring that university scientists acquire an understanding of the practical problems faced by industry to enable them make their teaching and R&D activities demand-oriented.

c) ***Cess on R&D Efforts and Role of Private Sector:*** Technology fueled industrialization requires up-keeping with the industrial development. There is a need to seed new technologies like renewable energy, electronics, new materials, biotechnology etc. NCST would determine a system of special dispensation in the form of equity participation and protective tariff package which would be offered to the private sector to nurse new technologies in the country.

Government alone cannot be expected to fully finance the R&D from its own resources. The private sector which is the ultimate beneficiary, should come forward and share the financial investment in R&D. They should select problems of immediate interest and provide necessary finances for execution of research on these projects. R&D programmes relating to the production methodologies, in the public sector R&D Institutes, would be encouraged as joint ventures with the private sector.

d) ***Commercialization of R&D Results:*** Research & Development programmes in the public sector should be evaluated against commercial criteria. Financial incentives linked to market success, should be provided to institutions, departments and individuals involved in R&D projects. The research & development institutes in the public sector may achieve at least 30% of self generation of resources through contract research, licensing of processes and products. Involvement of consulting firms with the R&D organizations would be encouraged to determine research needs of the manufacturing sector thereby initiate demand oriented research to benefit of R&D organization.

In order to commercialize different processes from the laboratory scale to the pilot-plant or to the semi-commercial scale, Scientific and Technological Development Corporation (STEDEC), was established in 1988, a subsidiary of PCSIR, for commercialization of processes and technologies developed by PCSIR. STEDEC has so far commercialized over

a dozen processes of PCSIR. The scope of the STEDEC functions would be enlarged for promoting commercialization of the output of other public sector R&D organizations.

e) ***Career Prospects, Service Conditions and Reward System for R&D Professionals:***

The major reason for poor output of the R&D system in the country is the permanent recruitment of the scientific and research staff and absence of the accountability. The staff feels a sense of security without productive R&D output. For a meaningful research and for the ultimate utilization of resources (men, material and funds), scientific staff may be recruited on contract basis with a clear-cut project targets (to be evaluated against economic viability criteria) and may be offered bonus cum attractive salary packages. This would provoke sense of working competition amongst the scientists. Incremental financial incentives should be given to institutes and individuals who develop viable project(s) and demonstrate success in commercialization of their output. The scientists who would not be able to produce any commercially viable results, would not have their contracts renewed.

Consolidation and Rehabilitation

4. About 130 R&D organizations, under different Federal Ministries and Provincial departments, are engaged in scientific and technological research and development activities in various sectors including agriculture, industry, public health, water resources, housing, communication, oceanography, energy and electronics. There is no elaborate mechanism for coordination and consolidation of their S&T research & development activities. For example, Ministry of Science & Technology coordinates the work of R&D organizations under its own administrative control; Agriculture Research Division fosters coordination of the agriculture research being undertaken at its own centres; University Grants Commission is responsible for promoting research in universities and Centre of Excellences; Pakistan Atomic Energy Commission coordinates research in energy falling within its perview, and SUPARCO works in space sciences. The R&D organizations, ministries and departments, work in isolation due to lack of proper dissemination of scientific information. Also there is no effective mechanism for dissemination and commercialization of their R&D output. During the Plan period, suitable mechanisms would be developed to consolidate the existing S&T institutions of various ministries and departments under one coordinating organisation.

5. Performance of R&D institutes has to be directly related to the availability of inputs in form of qualified manpower, materials and required infrastructures. In the past, the number of S&T organizations have proliferated at the cost of adequate financing for the existing research organizations. Consequently, the level of financing of important R&D organizations like PCSIR, NIP, NIO, PCRWR, HDIP, PMD, NIE, PMRC has been abysmally small. They could not even manage to attract good scientists and technologists due to relatively poor working conditions. Equipment in most R&D organizations, has become outdated and obsolete. There is no mechanism to continuously upgrade both equipment and professional skills. There is a need for consolidation and rehabilitation of the whole research and development system. In order to spare the resources for rehabilitation and consolidation of the existing R&D system, it will be necessary to inhibit further proliferation of non-cost-effective R&D institutions and devise checks against projects and; fragmentation of R&D activities which has resulted in thinning out of resources and caused in-effectiveness. Non-productive institutions/projects would either be abandoned or integrated with other productive

institutions of the relevant fields. In order to achieve optimum R&D output from the existing R&D institutions, about 40% of Eighth Plan allocation has been earmarked for their consolidation and rehabilitation.

Landmarks of Eighth Plan

6. The ongoing 8th plan programmes will attempt to improve the infrastructure, equipment and other facilities in the existing R&D organizations, besides undertaking some new initiatives under the National Technology Policy. The output of the R&D programmes cannot be quantified directly in real terms but gradually the impact of the research results is expected to become evident through dissemination and commercialization of new technologies. Highlights of some of the expected achievements of R&D work is given below:

7. The S&T manpower development programme of the Ministry of Science and Technology, under which scientists, doctors and engineers are sent abroad for MSc. & PhD in high-tech fields shall contribute towards manning the R&D institutes, universities, and industries in the country by highly qualified manpower. By the end of the 8th Plan about 400 scholars are expected to come back after completion of MS & PhD. PCSIR has so far commercialized more than 12 processes to private sector, imparted technicians training in the fields of process control, instrumentation, and precision mechanical technology etc. During 8th Plan, these programmes will be accelerated further through various incentives and participation of private sector. National Building Research Institute has developed low cost building materials. Its commercial exploitation will be carried out through private entrepreneurs. National Institute of Electronics will continue to extend its expertise to solve different defence oriented problems. Benefits of prototypes developed by it will be disseminated by commercialization through private sector. This is expected to be an important step towards self-reliance in electronic gadgets. National Institute of Oceanography has been doing a great deal of work on the marine fisheries and marine resource exploitation and development of shrimp farming. These will be expanded and their benefits will be disseminated for exploitation by the private sector. National Institute of Power (NIP) has developed the expertise for short circuit testing of transformers and has been extending limited services to WAPDA. During 8th plan, the services of NIP will be extended further to other public departments (e.g Railways) and private sector (e.g Fan industry). Pakistan Council of Appropriate Technology has worked on energy saving by developing energy saving devices and establishing mini/micro-hydel plants on high head and low discharge waterfalls in NWFP and Northern Areas. Microhydel programmes will be expanded during the plan period. The design of existing fuel saving devices will be further improved and disseminated. Pakistan Meteorological Department has been extending their services on weather surveillance to different agencies. Technical competence of Met. Department will be enhanced by strengthening its infrastructure. National Institute for Biotechnology and Genetic Engineering Faisalabad, which has become partially functional, will be completed and make effective contribution towards solving industrial problems like disposal of chemical wastes, energy production from garbage, environmental hazards and viral diseases of agriculture etc.

Targets and Allocations

8. Total financial allocation for the Science and Technology sector will be Rs 4600 million out of which Rs 4045 million will be for the programmes of the Ministry of Science and Technology. Allocations by sectors and programmes are given in Statistical Appendix Table-III-5.1. About 40% of the 8th plan allocation will be utilized for completion of the ongoing projects and consolidation of the existing R&D institutions. The remaining amount will be utilized for R&D initiatives under the Technology Policy. Efforts will be made for gradual shift of the R&D institutions from the existing public sector dependancy towards resource generation and self-reliance. For this purpose necessary reforms will be made in their management, funding and delivery system.

9. Major physical targets of the 8th Plan will include encouragement of the private sector, initiating joint ventures with public sector R&D organizations, encouraging private sector to invest in R&D by offering tax incentives and cess on investment in R&D. The S&T manpower development training programmes will be re-shaped to reduce cost of the project by introducing split PhD programme in local universities. New programmes and projects in biotechnology and genetic engineering, renewable energy, electronics and new materials will be initiated under the National Technology Policy by PCSIR, NIBGE, CAMB, NIE. In the water sector, research & development work on crop zoning, conjunctive use of surface and ground water and developing low evapotranspirative high yield crops in arid zones will be initiated. Two major research projects relating to the field of energy, namely; "Electric power based on internal combustion engines" and "solar bowl" will be initiated by NIP and NIST jointly. Ministry of Science & Technology will despatch at least two expeditions to Antarctica during the plan period.

III-6

ENERGY

1. The total commercial energy consumption (delivered energy) in 1992-93 was 21.654 millions tonnes of oil equivalent (MTOE) which is projected to increase to 30.270 MTOE by 1997-98. The growth in the consumption of commercial energy during 8th Plan is estimated at 5.87% as against the 7th Plan growth rate of 6.7% .

2. Based on available information and estimates the consumption of non-commercial energy is currently estimated to be 19.862 MTOE for 1992-93 and is projected to be 23.450 MTOE in 1997-98.

Energy Demand and Consumption

3. Summary of the primary energy demand projections is given in Table 6.1 below whereas details are given in Sub-Sectoral programmes.

Table 6.1
Primary Energy Demand

	1987-88	1992-93	1997-98
POWER			
Max. Demand (MW)	5821	8611	11173
Annual Growth Rate (%)		8.1%	5.3%
OIL			
Net Primary Demand * (000 tons)	9435	13200	19170
Annual Growth Rate (%)		6.9%	7.7%
GAS (including feedstock) **			
Primary Avg. Demand MMCFD	1200	1598	2200
Annual Growth Rate (%)		5.9%	6.6%
COAL			
Demand (000 tons)	5747	6456	10517
Annual Growth Rate (%)		2.4%	10.3%
BIOMASS			
Demand (000 tons)	50720	60214	65240
Annual Growth Rate (%)		3.5%	1.6%

* Includes non-energy products.

** Includes feedstock for fertilizer.

Source: Working Group on 8th Plan, analysis by Energy Wing and agencies concerned i.e. WAPDA/KESC for power, OCAC/PSO/EW for oil, SNGPL/SSGC/EW for gas, M/o Petroleum/EW for coal and EW for Biomass.

4. Sectoral consumption of delivered commercial energy (Statistical Appendix Table III-6.1) the growth in energy consumption in the residential sector and its share in consumption of electricity and gas is very high. These figures exclude traditional (non commercial) sources of energy, such as firewood and biomass, which also make up a large portion of energy consumption in the residential sector particularly in the rural areas. Whereas a part of the increase in the share of electricity consumption of the residential sector could be a corollary of the slow growth in the industrial sector, the other important reasons are relative price increases and growth in income. The increase in the supply of gas to the household sector is, however, is a result of the policy to replace kerosene and fuelwood. As regards the sectoral consumption pattern of oil, the reduction of the differential between the prices of kerosene and diesel has reduced mixing of the two fuels thereby showing lower kerosene consumption (and % share) in the residential sector. The projections for 1997-98 are based on a detailed analysis of end-use activities.

Energy Supplies

5. The total commercial energy supply in the country is shown in Table 6.2. Salient features of changes in the energy supply picture are described in the following paragraphs.

Table 6.2

Primary Commercial Energy Supply

	1982/83		1987/88		1990/91		1992/93		1997/98	
	000 TOE	share %	000 TOE	share %	000 TOE	share %	000 TOE	share %	000 TOE	share %
Imported Crude/POL (net)*	5720	31.2%	7492	29.4%	8376	28.1%	11083	31.6%	15204	32.8%
Indigenous Crude (net) *	636	3.5%	2189	8.6%	2756	9.3%	2936	8.4%	3230	7.0%
Total Oil	6356	34.7%	9681	38.0%	11132	37.4%	14019	40.0%	18434	39.8%
Natural Gas **	7486	40.8%	9234	36.2%	11272	37.8%	12546	35.7%	16863	36.3%
Imported Coal	342	1.9%	561	2.2%	597	2.0%	681	2.0%	1067	2.3%
Domestic Coal (net) ***	1519	8.3%	2189	8.6%	2519	8.5%	2932	8.4%	4705	10.1%
Total Coal	1861	10.2%	2750	10.8%	3116	10.5%	3613	10.4%	5772	12.4%
Hydel	2572	14.0%	3777	14.8%	4140	13.9%	4773	13.6%	5256	11.3%
Nuclear	51	0.3%	57	0.2%	135	0.5%	113	0.3%	94.8	0.2%
Grand Total	18327	100.0%	25499	100.0%	29795	100.0%	35064	100.0%	46420	100.0%

* i.e. net of exports

** includes feedstock for fertilizer.

*** Includes unreported coal.

Source: Working Group on 8th Plan, analysis by Energy Wing and agencies concerned i.e. WAPDA/KESC for power, OCAC/PSO/EW for oil, SNGPL/SSGC/EW for gas, M/o Petroleum and Natural Resources/EW for coal and EW for Biomass.

6. The increased share of domestic crude oil in the total energy supply (from 3.5% in 1982-83 to 8.4% in 1992-93) is a consequence of increased activity in drilling and discovery of a number of new oil fields. This has resulted in lower dependence on imported crude, though part of this has been offset by higher imports of petroleum products. The projections for the Eighth Plan, however, show that despite reduction in the share of oil in commercial energy supplies, it will continue to make a large contribution in energy supplies because of rapid increase in oil consumption in new thermal power plants and the transport sector.

7. Although there has been a substantial increase in natural gas supplies between 1982-83 and 1992-93 (from 7.5 MTOE or 951 MMCFD to 12.5 MTOE or 1623 MMCFD), its share in overall energy has not increased. The conservative estimate for the 8th Plan shows that due to the policy of promoting greater production and utilization of gas, its share may increase to 36% by the end of the plan period. It will be strived to promote substitution of oil by gas by promoting its uses in off-peak winter period. This would help reduce oil consumption and increase the share of gas in energy supply. The share of hydel energy has not increased as no new major hydel project would be commissioned during Eighth Plan after the Tarbela units. However, 1450 MW hydel capacity would be under installation at Ghazi Brotha during the plan period which will be commissioned in the early part of the ninth plan. The share of coal has shown slight increase. This may, however, be optimistic as the outcome will depend upon success of coal utilization and development programmes. In summary, the overall contribution of energy supplied from oil has increased, a trend which must be checked by timely policy decisions and resource development efforts.

Energy Balance

8. Summary of the balances for 1992-93 and 1997-98 are given in Table 6.3 below:-

Table 6.3

Energy Balance 1992-93 **

(000 TOE)

	HYDEL / NUCLEAR	ELECTRICITY	OIL	GAS	COAL	OTHER	TOTAL COMMERCIAL ENERGY	FUELWOOD	OTHER BIOMASS	TOTAL ENERGY
ENERGY SUPPLY										
Indigenous (net)	4886		2936	12546	2932		23300	11735	8853	43888
Imports (net)			11083		681		11083			11083
Total	4886		14019	12546	3613		34383	11735	8853	54971
Transformation / Losses	-4886	3961	-4755	-6965	-707	1010	-12342	-306	-420	-13068
Adjustment *		-1042					-1042			-1042
Total	-4886	2919	-4755	-6965	-707	1010	-13384	-306	-420	-14110
Energy Delivered		2919	9264	5581	2906	1010	20999	11429	8433	40861

Energy Balance 1997-98 **

(000 TOE)

	HYDEL / NUCLEAR	ELECTRICITY	OIL	GAS	COAL	OTHER	TOTAL COMMERCIAL ENERGY	FUELWOOD	OTHER BIOMASS	TOTAL ENERGY
ENERGY SUPPLY										
Indigenous (net)	5351		3230	16863	4705		30148	13166	10893	54208
Imports (net)			15204		1068		16272			16272
Total	5351		18434	16863	5773		46420	13166	10893	70480
Transformation / Losses	-5351	6173	-6134	-9169	-1800	1167	-15113	-95	-514	-15723
Adjustment *		-1090					-1090			-1090
Total	-5351	5083	-6134	-9169	-1800	1167	-16203	-95	-514	-16813
Energy Delivered		5083	12300	7694	3973	1167	30217	13071	10379	53667

*Includes losses due to transformation, transportation and distribution, uses as feedstock and non-energy products.

**Source: Working Group on 8th Plan, analysis by Energy Wing and agencies concerned i.e. WAPDA/KESC for power, OCAC/PSO/EW for oil, SNGPL/SSGC/EW for gas, M/O Petroleum and Natural Resources/EW for coal and EW for Biomass.

Review of Targets During Seventh Plan

9. A summary of the physical targets versus the achievements during the 7th plan are given in Table 6.4 below:

Table 6.4
Summary

S/N		Benchmark 87-88	7TH PLAN TARGETS BY JUNE 1993	Achievement by June-93	Percent Achievements in targets.
A.	PHYSICAL TARGETS				
1.	Installed Capacity (MW)				
	WAPDA	5549	9985	7911	
	KESC	1108	1768	1738	
	PAEC	137	137	137	
	Private	0	1330	0	
	Other (PASMIC etc.)	0	0	0	
	Total	6794	13220	9786	
	Addition in Capacity		6426	2992	46.6
2.	Maximum Demand (MW)				
	WAPDA	5031		7522	
	KESC	1033		1347	
	Aggregate	6064		8869	
	Diversified	5887	8900	8611	
	Addition in Demand		3013	2724	90.4
	Growth Rate (%)		9.42	7.90	
3.	Electricity Generated (GWH)				
	WAPDA	27451		40233	
	KESC	5746		7766	
	Others	0		640	
	Total	33197	47686	48639	102.0
	Addition in Generation		14489	15442	
	Growth Rate			7.94	
4.	Electricity Sale (GWH)				
	WAPDA	20658		31338	
	KESC	4558		5882	
	Total	25216		37160	
	Growth Rate			8.06	
5.	Losses (%)				
	WAPDA	24.59	{ 19.0 }	23.2	
	KESC	23.48		33.97	
6.	Consumers (Million)				
	WAPDA	5.78	9.03	8.17	
	KESC	0.88	1.28	1.17	
	Total	6.66	10.31	9.34	
	Addition in Consumers		3.65	2.68	73.4
	Growth Rate		9.15	7.0	
7.	No. of Villages Electrified - Cumulative Addition	17724	28060 10336	35171 17447	168.8
8.	Oil Demand (Domestic) (000 Tons)	8543	13710	12200	89.0
9.	Oil Production (BPD)	44684	76000	60000	78.9
10.	Oil Bill (\$ Million)	1052	1863	1578	84.7
11.	Refinery Capacity (Million Tons)			6.33	
13.	No. of wells drilling - Annual (Average) Cumulative	51	75 375	43 217	57.9
14.	Gas Production (Average) (MMCFD)	1200	2095	1598	76.3
15.	No. of gas consumers (Cumulative) (Million)	1.18	1.98	1.8	90.9
16.	LPG Production (Tons/Day)	323	518	303	58.5
17.	Coal Production (Million Tons)	4.89	6.9	6.5	94.2

Source: Working Group on 8th Plan by Energy Wing and agencies concerned i.e. WAPDA/KESC for power, OCAC/PSO/EW for oil, SNGPL/SSGC/EW for gas, M/O Petroleum and Natural Resources/EW for coal and EW for Biomass.

10. This review shows that because of resource constraints and physical implementation delays the achievement of targets in respect of power generation capacity less than the target set in the Seventh Plan. The private sector projects are also experiencing delays because their original schedules were optimistic in respect of formulation of project details and arrangements of finances. The energy conservation campaign has made some dent but it needs to be stepped up. The development of coal, particularly that of Lakhra, has shown serious delays which need to be overcome in order to provide fuel for WAPDA's power projects. The energy sector prices have been adjusted but further adjustments would be required.

Energy Resources

11. The present estimates of recoverable resources of commercial energy and their life spans, if all the demand is met locally, are given below in Table 6.5.

Table 6.5

Commercial Energy Resource Picture of Proven Resources

	PROVEN RECOVERABLE RESOURCES REMAINING AS ON 1ST JULY, 91	LEVEL OF PROD 92-93	PRESENT LEVEL OF CONSUMP.. 92-93	EXPECTED CONSUMP. LEVEL 1997-98	EXPECTED G.R 93-98	RESOURCES SPAN IF ALL DEMAND IS MET FROM LOCAL PRODUCTION
OIL	203.00 MILLION BARRELS	60000 BBL/DAY	91.00 MILLION BARRELS	137.00 MILLION BARRELS	8.5%	ABOUT 2 YEARS
GAS	23.63 TCF	1431 MMCFD	1282* MMCFD	2554 MMCFD	9.4%	18.45 YRS
HYDRO	26563 MW	2897 MW	3761 MW	5019 MW	6.69%	-
COAL	313.5** MILLION TONS	5.63 MILLION TONS	5.63 MILLION TONS	10.52 MILLION TONS	10.3%	19.5 YEARS

* 149 MMCFD consumed in compression, surface facilities and losses.

** Excluding Thar (potential estimated at about 100 Billion tons as per preliminary results).

Source: - Oil and Gas, Ministry of Petroleum & Natural Resources.

- Hydel WAPDA
- Coal GSP

12. As can be seen, the recoverable reserves of oil are extremely low while coal and gas resources might appear to last for a number of years at the present levels of demand. However, since about 39% of commercial energy supply in 1992-93 is from oil, the country would remain dependent on imports of large quantities of oil if major discoveries of oil are not made. Various estimates of future potential of commercial energy resources, however, do not present a bleak picture. Summary of estimates of potential of oil & gas, coal and hydel is given below:

Energy Resource Potential

	<u>Probable</u>	<u>Possible</u>
Oil (Billion Barrels)	13.2	97-404
Gas (TCF)	40	1443
Coal (Billion Tons)	2.94	22.13
Hydel (MW)	28,345	40,000

Source:

Oil	=	ECL Study	World Bank
Gas	=	ECL Study	World Bank
Coal	=	GSP (Geological Survey of Pakistan)	
Hydel	=	WAPDA and Working Group	

Eighth Plan Objectives and Strategies

13. The issues facing the Energy Sector are, not only restricted to meeting the demand in a rational manner but also to restructure hitherto predominantly public sector monopolies and to address on a crash and long term basis the limitations of the presently proven energy resources, continued dilemmas about exploitation of hydel resources, highly inadequate mining for coal, constraints of transmission and distribution infrastructure and continued limitation of financial resources. As noted in preceding paragraphs, the proven energy resources of the country are very limited and unless major efforts are undertaken to develop the potential of the country, both shortages and growing dependence on imported energy would be the outcome.

Objectives

14. The key objectives of the Eighth Plan are :

- i) To continue to promote energy conservation, rational use and demand management.
- ii) To meet the energy demand of the economy in a sustainable manner.
- iii) To increase self-reliance in energy supplies by proving, exploring and exploiting indigenous resources.
- iv) To improve and expand the system of transmission and distribution of energy.
- v) To decentralise and deregulate the Energy Sector Agencies and to promote induction of private sector.
- vi) To rationalise prices, remove subsidies and enable adequate self financing of development programmes of Energy Sector agencies from their revenues.

- vii) To develop manpower needed for the Energy Sector and to promote applied Research & Development activities.
- viii) To improve energy planning, conservation and other energy institutions in public sector.
- ix) To increase indigenous manufacturing of energy equipment.

Strategy

15. In view of the long gestation periods required for energy projects, the policies for the Energy Sector have been set out in a long term perspective to pursue the objective briefly outlined above. Specific projects and programmes of the Eighth Plan are identified within the context of long term strategy. In the short term i.e. next 2-3 years, the choices are limited to earliest possible development and production from existing proven resources on the supply side and energy conservation on the demand side. In the long run, however, more options would be available to increase indigenous energy supply and to effect structural changes in supply and demand patterns as well as delivery systems.

16. A multi-pronged strategy has been recommended to reduce investment requirements through improvement in sectoral efficiency. This strategy, which is based on the successful experience of other regional utilities operating within similar socio-cultural investment and constraint are given in policy measures and their strategies. It is envisaged that estimated impact of these demand side management measures is a reduction in peak demand of 2100 MW by 1998.

A: Demand Side Strategy

17. As brought out earlier, there is a significant scope for managing the demand to curb extravagant uses, rationalize fuel choices, conserve energy and promote productive uses of energy as against increasing consumption for non-productive uses.

18. The need and necessity to reduce the system losses, manage the demand and promote rational energy use habits cannot be over-emphasised. This, in a way, is a low cost source of energy supply that can be developed in a short time. Usually easy to harness, is environmentally friendly and often the cheapest source of energy. The demand side package proposed for the Eighth Plan is summarized below:

Policy MeasuresStrategies

- | | |
|-------------------------------------|---|
| i) Energy Conservation | <ul style="list-style-type: none"> a) Creation of awareness and persuasion through media for conversation. b) Removal of price distortions and subsidies to curb extravagant use and to promote appropriate fuel choices. c) Introduction of day light saving programme. |
| ii) Reduction of Peak Demand | <ul style="list-style-type: none"> a) Shifting of load to off-peaks by creating differential between peak and off-peak energy charges. b) Supply to tube-wells during off-peaks only. c) Seasonal tariffs to promote maintenance outages by industry in non-critical months. d) Installation of time of day metering devices at industries and large institutions and price incentives to shift loads to off-peak hours. Promotion of similar system of metering in other sectors. e) Staggering of industrial holidays to reduce system peaks in critical periods. |
| iii) Energy Efficiency Improvements | <ul style="list-style-type: none"> a) Embark upon programmes for improvements in the consumer power factor. b) Review and rationalization of the structure of duties/taxes to promote procurement of energy conservation equipment and materials. c) Policy Package for promoting the use of high efficiency appliances/vehicles and building materials, mandatory energy efficiency labelling and setting up of standards and codes wherever feasible. d) Mass transit systems for major cities, improvement in railways, to improve transportation efficiencies. e) The cost of service would be recovered from all categories of consumers except low income consumers. |

- iv) Substitution

To promote the use of indigenous energy resources, more coal demand would be created by committing thermal power plants on coal. Preference will be given to indigenous coal based power plants over imported coal. Coal use would be encouraged for cement plants. Options of use of coal briquettes as substitute for firewood/charcoal would be further evaluated. Substitution of oil demand by gas will also be encouraged in accordance with the allocation priorities for uses of gas as outlined in succeeding paragraphs.
- v. Commercialization of Demand Management Activities

The beneficiaries of energy conservation programmes should contribute towards the cost of the programmes. The benefits of energy conservation should be promoted in such a manner that the beneficiaries find it commercially viable to make their own investments. The preferred alternative to promote energy conservation would be through incentives and pricing.

B: Supply Side Strategy

POWER

I Hydel Development

19. The estimated hydel potential of the country is in the range of 26,563 MW out of which 3761 MW of potential has been exploited by the end of the Seventh Plan. Preliminary ranking of a number of sites on Indus River for future development has already been done whereas projects of Kalabagh Dam, Basha Dam and Ghazi Barotha are at various stages of preparation/implementation.

20. Besides the large hydel stations, there are a number of sites where small and mini hydels can be developed. These hydel projects can meet the local needs.

21. Salient features of the policy for hydel development, adopted for the Eighth Plan, are as follows:

Large & Medium Hydels

- a) First priority be given to the accelerated development of hydel projects for which feasibilities and engineering studies have been completed to enable realisation of tangible benefits in the shortest possible time provided all issues are settled.
- b) Optimal use of existing hydel stations.

Small and Mini Hydels

- a) Investigations and development of small and micro hydel projects by the Provinces concerned for meeting local area demand.
- b) Provision of advisory services by WAPDA to the Provinces for the development of small and mini hydel projects.
- c) Implementation of schemes that can be integrated with the national grid, and fit within the least cost generation expansion programme should be entrusted to WAPDA.

II Allocation of funding for studies/investigations and project preparation

22. Identification, studies/investigations and project preparation for hydro project is a fairly cost-intensive and lengthy exercise. In order to maintain adequate portfolio of projects ready for implementation an amount of at least 200-300 million rupees be allocated for an on-going programme of studies/investigations and project preparation of hydro projects.

Thermal Projects

23. It is proposed that all new Thermal power projects identified by WAPDA/NPP may first be offered for competitive bidding in the private sector for which necessary tender documents and basic engineering documents should be prepared by WAPDA.

III Co-generation and Self-Generation

24. In order to encourage self-generators and co-generators to make power available in the critical period, co-generators will also have the agreements with WAPDA for buy-back of power as and when needed. Attractive tariffs for this would be formulated.

IV Energy Loss Reduction & Operational Improvement

25. The performance of both WAPDA & KESC particularly KESC, vis-a-vis energy loss reduction and operating efficiency in the past had been pathetic. At present total system losses in WAPDA are estimated at around 23.2%, and in KESC at around 33.6%. Following targets are set for energy loss reduction/operational improvements for the 8th Plan:-

- For WAPDA, 0.5% reduction every six months for the next five years.
- For KESC, 2% reduction every six months for first two years, followed by 1.5% reduction every six months for three years.
- Upgrading and modernization of operational regimes.

26. This will translate into a reduction in gross system peak demand of about 980-1030 MW, and will reduce annual operating costs by about Rs 9.2 billion by 1998.

Village Electrification Programme

27. In order to give a major impetus to rural electrification, a crash programme of electrifying 7700 villages/abadies by June 1995 should be launched for which donor funds are available from OCEF and IBRD. Subsequently, a target of 4000 villages/abadies be fixed for balance of 8th plan period.

28. WAPDA has already initiated preparation of a master plan for village electrification, effective system management and expansion. Towards this end, mapping of existing feeders is already in progress. As regards future expansions in new areas, WAPDA will carry out survey of all areas and prepare a master plan for electrification for the whole country. Initially, however, priority will be given to electrification of areas within 20 k.m. of the existing grid stations. Expansion in the system through cooperatives/societies would also be encouraged as discussed earlier. Ministry of Water and Power will install a system of monitoring of progress in achieving physical targets of village electrification, distribution of power and STG facilities.

29. In view of the fact that a large area of the country is without electricity, it has to be recognised that despite maximum efforts during the Eighth Plan, it would not be possible to cover all the far flung areas by extension of grid. In order to cater for the needs of such areas, a programme for providing decentralised electrical power in the far flung areas through diesel, solar or wind Energy would be prepared and implemented by WAPDA. In principle this programme would focus on areas which are not likely to get electricity in 10 years or those which are beyond 20 k.m. from the grid system.

V Privatization of Power Sector

30. The power sector in Pakistan comprises of two vertically integrated public sector monopolies i.e. WAPDA and KESC which are responsible for generation, transmission, distribution and village electrification. Most electricity systems world-wide have traditionally been organised in a similar manner particularly for generation and transmission. It was generally believed that electrical systems were natural monopolies due to compulsions of economy of scale, lack of market competition and the necessity that the production and consumption of electricity must be coordinated across the entire system and virtually instantaneously produced and sold.

31. Various routes for privatization of electricity sector are being pursued in the world:

- i) Setting up of new generation projects by private sector for sale of electricity to public/private monopolies (e.g. Build Own Operate (BOO) or Build Own Operate and Transfer (BOOT) type projects) requiring price contracts upfronts.
- ii) Market model (as in Britain).

32. Pakistan has already initiated its privatization efforts according to the first model under which a number of BOOT and BOO type projects are being considered. A detailed policy in this regard has already been announced, salient features of which are given below.

- Purchase of electricity at 60% plant factor would be guaranteed.
- Projects on BOO or BOOT concepts based on competitive bidding or unsolicited proposals would be accepted.
- The Government has already established the Private Sector Energy Development Fund (PSEDF) with the assistance of various donors. Approved private sector projects would be eligible for loans of upto 30% of the project cost from this fund. This arrangement would greatly help the private sector in providing long term financing and cushioning their risks.
- An instrument of Extended Co-financing (ECO) has also been put in place alongwith the World Bank to safeguard the risk of availability of foreign exchange with the Government.
- Standardized Implementation, Fuel Supply and Power Purchase Agreements.
- Introduction of bulk tariff of 6.5 cents per KWH for 10 years. A premium of 0.25 c/Kwh for projects above 100 MW commissioned by end 1997.
- Allowing private investors the option of making their own arrangements for import and transportation of fuel/oil for their power plants.
- Permission to power generation companies to issue Corporate Bonds, both bearer and registered.
- Permission to issue shares at discounted prices to enable venture capitalists to be provided higher rates of return proportional to the risk, without the current stipulated 10% discount limit.
- Exemption from Iqra Surcharge, Flood Relief Surcharge, and Import License Fees which would be treated as a part of custom duty for power projects. This applies to all projects (including those under construction) and will lead to reduction of electricity tariff.
- Permission to foreign banks to underwrite the issue of share and bonds by the private power projects.
- Change in Companies Ordinance to permit registration anywhere in Pakistan to allow them to avail reduction in Stamp Duty and Registration Fees for registration of debt documents allowed by the Federal Government.

- Same tax facilities for private sector instruments as those available to NBFIs as financial institutions.
 - Recommendation by GOP to State Bank for modification of Prudential Regulations to allow 80:20 debt equity ratio,
 - Removal/reform of Section 13 of 1947 Foreign Exchange Regulation Act to enable non residents to purchase securities issued by Pakistanis without State Bank permissions.
 - Abolition of 5% limit on investment of equity in associated undertakings.
 - Government approval for an independent rating agency so that individual investors can make informed decisions.
 - For local engineering and manufacturing companies, the present SRO 555(1)/90 to be made applicable to private power plants.
 - Orders received by local engineering & manufacturing companies from private sector projects to be treated as export for refinance under State Bank Finance Scheme for Exports.
 - One Window Operation through the establishment of Private Power Board.
 - Incentives for co-generation by providing adequate buy back tariff based on the principal of avoided cost.
 - Issuance of a separate SRO consolidating all existing and new exemptions and incentives for private sector power plants.
 - Setting up of National Electricity Regulatory Authority and corporatization / privatization of WAPDA/KESC assets should be expedited.
33. Besides policies related to new power projects, it is proposed to sell WAPDA and KESC assets and/or to take appropriate measures for their privatisation.
34. It is proposed that the sale proceeds of divested assets of WAPDA/KESC should be reinvested in the energy sector for hydel projects.

FUEL**I Oil & Gas Exploration and Development**

35. The major reasons for inadequate indigenous production of oil and gas can be attributed to:

- a) Low level of exploration activity reflected in number of wells drilled, investment and area prospected.
- b) Lack of information about a large area of the country which is yet to be explored.
- c) Better geological prospects and incentives available elsewhere in the world.
- d) Lack of discovery of a large resource of oil reservoirs discovered so far.
- e) Security concerns.
- f) Drawbacks/shortcomings of existing petroleum policies.

36. Taking due cognizance of the factors mentioned above, the Government has recently announced a new petroleum policy. The salient features of the policies and strategies related to exploration and development of oil and gas are given below. They cover two aspects namely a) procedures and regulatory measures ii) package of economic incentives. These would be adjusted, as needed, on the basis of experience gained to achieve the objective of greater self-reliance. Incentives available to companies would be frequently reviewed to match with the trends in the world.

Procedural and Regulatory Measures

37. Various procedural and regulatory measures contained in the Energy Policy are outlined below:

a) *Expeditious Disposal of Applications*

- i) The procedures for expeditious disposal of concession applications have been streamlined. It has been decided to introduce a new concession award process through competitive bidding for the work program, thereby introducing transparency and minimizing discretion.
- ii) All applications for Exploration Licences will be decided within 60 days. Applications which are contested may take upto 120 days but no more.
- iii) It has been decided to create a negotiation cell in the Directorate General Petroleum Concessions (DGPC) for expeditious disposal of applications in accordance with the aforesaid deadlines.

b) *Operations in Baluchistan and Tribal Areas*

- i) A high level committee will be formed to review operational and security problems in Balochistan and the Tribal Areas of NWFP. This committee shall submit its recommendations in consultation with the Provincial Governments and other parties concerned within 4 months.
- ii) Oil and Gas installations in Balochistan and the Tribal Areas shall be exempted from the application of Industrial Relations Ordinance, 1969.
- iii) The law and order situation in and around the producing fields in Balochistan will be improved for sustaining optimum production.

c) *Holding Company*

A new 100% GOP owned Holding Company is proposed to be formed after the carrying out of a detailed study to separate GOP's ownership and regulatory functions. The GOP participation in joint ventures will be handled through this Holding Company. Pending formation of such a company the GOP's investment in joint ventures will continue to be handled by the Ministry of Petroleum and Natural Resources.

d) *Autonomy to the Oil & Gas Development Corporation*

OGDC will be restructured on commercial lines and its Board of directors strengthened, to allow it complete autonomy and authority in all administrative, operational and financial matters. As a first step OGDC will be converted into a joint stock company by June 30th, 1995 after necessary amendments to the OGDC Ordinance. The GOP will restructure its investments in OGDC to make it a viable joint stock company.

e) *Incentives for Local E&P Companies*

There is need to develop a strong indigenous base in exploration and production activities so that the exploratory effort is sustained at a reasonable level during periods in which foreign investment is minimal. Following incentives are proposed to be provided:

- i) A local E&P company investing a minimum of 5% during exploration phase will be assigned an additional share out of the GOP's Working Interest after Commercial Discovery. Provide, however, that if two or more local E&P companies participate in a joint venture, then the GOP will assign a maximum of 5% out of its Working Interest to such companies on a pro-rata basis. However, such E&P companies should neither be affiliated, associated, holding or subsidiary companies of each other. Except for this and other incentives mentioned in this Policy, local and foreign E&P companies will be treated equally.

- ii) Local E&P companies will, on a case to case basis, be entitled during the exploration phase to receive foreign exchange against payment in Rupees to meet their day to day obligations under Permits, Licences and PCAs. After Commercial Discovery, local E&P companies would be paid upto 30% of their sale proceeds in foreign currency to meet their day to day operational requirements. For project financing after Commercial discovery, local E&P companies will be required to make their own foreign exchange arrangements.

f) *Gas Allocation*

38. Various areas are classified in 3 zones as follows:-

Zone-I	High risk-High cost
Zone-II	Medium risk-High cost
Zone-III	Low to Medium risk-Low cost

These are further shown on the map. For allocation of gas the GOP will decide within 3 months of Commercial Declaration in Zone 3 to allocate gas to specified buyers (gas companies/individual consumers like power/fertilizer). Thereafter the gas producer and the specified buyer will enter into an agreement within 6 months specifying the time frame for the sale/purchase of gas on a "take or pay" basis. If no allocation of gas is made by the GOP within 6 months of Commercial Declaration or no agreement is reached as specified above, the producers will be free to dispose of the gas as they wish. In the case of gas production from Zones 1 and 2 the producers will be free to dispose of the gas as they wish.

g) *Miscellaneous Matters*

- i) DGPC is authorized to allow export of data for primary processing.
- ii) The requirement for security clearance of expatriates in discontinued and security clearance will be done at the time of issuance of visas.
- iii) Commercial Declaration of a Discovery can be accepted even on the basis of one well, subjected to justification, current rules and regulations.
- iv) Steps will be taken to streamline the procedure for land acquisition by E&P companies. A working group comprising representatives from the GOP, the concerned Provincial governments and the Industry shall be formed to review the procedures and submit recommendations to the Cabinet within 6 months.

Economic Package

39. The Economic Package has been defined and fixed for three defined geological Zones determined on the basis of prospectivity and corresponding financial and economic parameters. The economic package will be reviewed from time to time in the light of additional information and may be subsequently adjusted to maintain international competitiveness.

i) *GOP Working Interest (Pre and Post Commercial Discovery)*

- All PCAs' will provide for a 5% carry for the GOP during the exploration phase. The expenditure incurred will be reimbursed by the GOP in installments from Commercial Discovery from production over a 5 year period. The level of GOP Working Interest in each Commercial Discovery in each Zone will be as under:-

Zone-1 (High Risk/High Cost)	15%
Zone-2 (Medium Risk/High Cost)	20%
Zone-3 (Medium Risk/Low to High Cost)	25%

ii) *Import Duties*

- No Import or Export Duties including Customs Duty, Sales Tax, Iqra surcharge or any other Surcharges shall be levied or charged on machinery, equipment, materials, specialised vehicles, accessories, spares, chemicals and consumables imported or exported in accordance with the approved list as applicable to Permits, Licences, Leases, PCAs and other Agreements for petroleum operations by an Operator including OGDC, its contractors or subcontractors during exploration development and production phases including enhanced petroleum recovery and compression projects. The said duty concession will apply to all Zones during all phases of operations.

- After a Commercial Discovery has been made the respective Operator will pay on an annual deferred basis consolidated fee equal to 3% of the total invoice value of the equipment, materials, specialised vehicles, accessories, spares, chemicals and consumables imported by it, its contractors and subcontractors free of duty during that year in respect of that Commercial Discovery and exploration activities in that particular concession. Items imported free of Import Duties under (c) below if sold to E&P companies as part of their services will be included in the total invoice value for calculation of the fee payable hereunder by the Operator. The value to be taken for the service company items for inclusion in the total invoice value shall be their invoice value at the time of import. The Operator shall submit an account of all import invoices to the Regulatory Authority and the Customs Department for confirmation with their record at the time of annual payment.

This provision will also apply to OGDC and other local E&P companies who hold Mining/Development and Production Leases and have not been required to enter into any agreement with the GOP.

- No Import or Export Duties including Customs duty, Sales Tax, Iqra Surcharge or any other Surcharges shall be levied or charged on machinery, equipment, materials, specialised vehicles, accessories, spares, consumables and chemicals imported or exported in accordance with the list approved by the regulatory Authority for this purpose for companies providing services covering inter alia seismic, drilling, cementation, logging, snubbing, testing or similar type of services to E&P companies including OGDC. Should any item imported free of Import Duties be sold other than as scrap or other than to other E&P companies or be used for providing services other than to E&P companies, the importing company will be liable to pay Import Duties including Customs Duties, Sales Tax, Iqra Surcharge and any other Surcharges that would have been payable had the item not been imported free of Import Duties.
- No Licence/Authorisation Fees shall be levied or charged on items imported or exported free of Import or Export Duties under this Policy.

iii) *Income Tax*

Under Regulations of Mines and Oilfields and Mineral Development (Government Control) Act, 1948, as amended in 1976, the Ministry of Petroleum and Natural Resources had the discretion to determine the aggregate of the taxes on income and other payments to the GOP in respect of the profits and gains of E&P companies within 50-55% before deduction of payments to the GOP but after deduction of depletion allowance. Accordingly the respective rates for the three Zones established under the Petroleum Policy are as follows:

Zone-1	50%
Zone-2	52-1/2%
Zone-3	55%

iv) *Crude Oil Transportation*

- Crude oil transportation to refineries will be left to producers as per market conditions.

v) *Production Bonuses*

- Production bonuses for Offshore and Onshore areas will be payable on a field by field basis.

vi) *Incentives for Deeper Drilling*

- For existing mining/production and development lease areas, if a company discovers hydrocarbons below the deepest known producing horizon, it shall be entitled to the same price formulae for oil and gas discovered from such deeper horizon as is applicable to onshore - offshore area.

vii) *Local Employment, Training and Social Welfare*

- Local employment, training and social welfare schemes will apply to all existing and new concessions.

viii) *Income Tax for Offshore Production*

- For offshore production, the rate of income tax will be lower by 5%.

II Refinery Policy

40. The Eighth Plan policy for new refining capacity would be that the refinery prices for both crude and products will be based on import parity. In order to attract private investment for the development of refining centres (on the coast, in the middle and north of the country) the following incentives are offered:-

- a) No permission will be required for setting up new refineries or expanding existing ones.
- b) The debt equity ratio for refineries will be 80:20 instead of 70:30 percent.
- c) The Limit of 10-40% on the rate of return for existing refineries will be removed subject to agreements being executed with the Ministry of Petroleum and Natural Resources covering development and expansion.

Other income earned from non-refinery operations can be retained by the refineries.

- d) Refineries may import crude oil, after lifting the allocated local crude oil from sources of their choice at prices not higher than those negotiated in Government-to-Government deals.
- e) Foreign exchange for the import as well as purchase of local crude oil from foreign oil producing companies will be provided by the GOP.
- f) Incentives in respect of Import Duties, Licence/Authorisation fees will be provided by the GOP.
- g) Refineries will be free to sell their products to any marketing company.

III Policy for Oil Marketing and Distribution

41. A free marketing environment will be created with due regard to quality and reasonable prices for the consumers. The policy measures intended towards this end are:-

Marketing Companies' Margins and Dealers' Commission

- a) The Commission of the marketing companies and dealers will be reviewed and adjusted annually by the GOP, if necessary, to enable them to invest in the construction of commercial POL storages, logistic and allied facilities of which a specific linkage would be stipulated improved margins and infrastructure will also help to eliminate short measuring, adulteration and other malpractices.

Retail Outlets

- b) Development of retail outlets will be left to the marketing companies subject to environmental and safety rules.

New Oil Marketing Companies

- c) New oil marketing companies in the private sector will be allowed provide suitable agreements are executed with the Ministry of Petroleum and Natural Resources to cover inter alia the development of infrastructure (pipelines, storages, distribution facilities etc.).

IV Policy For Natural Gas/LPG/CNG

Natural Gas Imports

- i) In view of the depletion of existing fields, the import of Natural Gas would be inevitable and the GOP will encourage the import of Natural Gas. A separate cell will be set up in the Directorate General, Gas to handle all matters concerning gas imports.

Sale of Natural Gas to the private sector

- ii) After appropriate regulatory framework is in place and subject to availability of gas, the private sector may obtain gas from trunk mains for distribution in specific areas or for specified purposes like power generation and fertilizer. For this purpose, a bulk purchase price formula will be announced for sales of gas to private distributors.

Natural Gas allocation for manufacturing industries

- iii) Manufacturing industries having continuous operations like glass, textile, ceramics, pharmaceutical etc. will, after existing commitments are met, be given priority for gas allocation over power generation to enable them to operate around the year.

Natural Gas consumer price

- iv) The consumer price of Natural Gas will be suitably and gradually adjusted so that the transmission and distribution system of gas to existing and new consumers can be expanded.

Liquefied Petroleum Gas

- v) Incentives in respect of Import Duties, Licences/Authorisation Fees will be set out.

Compressed Natural Gas

- vi) The use of CNG in vehicles will be commercialized. In addition the industrial gas tariff will apply for conversion to CNG and will only be revised if there is a change in the consumer price of motor gasoline. The existing price differential between industrial gas tariff and motor gasoline will be maintained as an incentive for CNG use.

V Exploration and Development of Coal

42. The large potential of coal in the country has been very inadequately tapped because of various reasons - the key ones being :

- i) Inadequate drilling programmes for confirmation of reserves and project development.
- ii) Protracted delays and unattractive terms for award of concessions.
- iii) Unviable block sizes leased to companies without proven necessary technical, and administrative skills and financial resources.
- iv) Ambiguities and shortcomings of fiscal and financial incentives.
- v) Poor institutional framework for coal development lacking confidence and commitment.
- vi) Lack of experience and know how in state-of-the-art techniques for large scale/mechanized mining operations and mine management.
- vii) Jurisdictional issues between Federal and Provincial Governments.

43. Large resources of fairly good quality coal, with probable estimated reserves of over 100 billion tons have recently been discovered at Thar. A well conceived development strategy would be completed on priority basis so that a viable and cheaper alternative to imported oil becomes available. Under the constitution, coal is a Provincial subject. Elements of the coal policy for the Eighth Five Year Plan are given below, whereas details of policies and instruments to implement these policies would be determined by the Provinces.

- a) Thar coal and other similar finds would be used primarily as fuel for Electric Power Plants with unit size of 200 MW or larger. The second priority would be export.
- b) Provinces will review and revise the existing concession rules and model agreements keeping in view the implications of fragmentation of licensed areas in small leases. Provisions in the concessions would be related to definite investment and physical activities for the development of coal within a given time frame. A study to streamline and revise the concession rules scientifically would be undertaken.
- c) For improving the level of confidence about coal reserves for its mining, GSP as well as the Provinces would embark upon a coordinated programme for closed space drilling to supplement the resources available to both these agencies.
- d) Coal mining equipment for development of coal mines would also be exempt from custom duties, Iqra and other upfront taxations just like power plants, refineries and pipelines.
- e) Promotional campaign for inviting private sector for coal development would be embarked upon based on suitable sized blocks of coal identified by GSP and the provinces and model concession agreements.
- f) System of granting of prospecting licences would be streamlined and widely publicized to facilitate competitive bidding. Efforts would be made to ensure quick processing of applications.
- g) Specific packages would be provided to promote private sector investments for large coal finds such as in the Thar - Badin areas which would also include guaranteed purchases of coal at a netback price derived from replacement of fuel oil for power generation.
- h) Consideration will be given to inviting integrated proposals for both coal development and power generation to link production and demand. WAPDA would also be encouraged to set up indigenous coal fired plants.
- i) To promote private sector, mining infrastructure would be developed by Provincial Governments.

- j) Turn key projects would be offered to qualified foreign/local entities to develop and operate coal mines for future years, train local staff and eventually transfer the projects to local organizations.
- k) Provisions regarding import of modern machinery and equipment, conversion of existing partnership/private limited companies to public limited companies, availability of funds to promote private sector exploration and closed space drilling, depletion and depreciation allowances and terms for borrowing would be reviewed and improved to promote private investment.
- l) Appropriate incentives would be given to indigenize mining technology/equipment.
- m) Preference will be given to power plants based on indigenous coal.
- n) Existing health and safety, environmental standards and present enforcement arrangements would be reviewed and improved in consultation with the Provinces.
- o) Ownership of coal, leasing of mining rights and receipts of royalties are a prerogative of the Provincial Governments. The option of large scale coal development for power generation with direct foreign investment can however be best pursued only under an approved mechanism in which Federal and Provincial governments both participate. The Provinces having large coal potential would set up Coal Development Authorities for preparing overall plans for development and use of coal, co-ordinated by the Federal Government.

VI Privatization in Fuel Sector

44. In the fuel sector, private sector investment has traditionally been made in oil and gas exploration and development, oil storage, transport, marketing and to some extent refineries and gas transmission companies in the form of varying degree of equity shares. The petroleum policy envisages greater incentives and promotional activity for attracting private investment in these areas. Privatisation of Pak-Arab Refinery Ltd., Pakistan State Oil Ltd., Sui Northern Gas Pipelines Ltd., Sui Southern Gas Company Ltd., and Oil & Gas Development Corporation would be referred to the Privatisation Commission for expeditious action for off loading a certain percentage of GOP's equity in these companies.

45. A major initiative to privatise the gas transmission and distribution companies has already been set in motion. Sui Northern Gas Pipeline Company is being privatised by gradual increase of the private sector in its equity and it is proposed that the Government would be holding less than 50% shares by the beginning of the Eighth Plan. A similar strategy is being followed for Sui Southern Gas Company where the Government would become a minority shareholder by the end of 1993-94. The other major candidates for privatization are oil pipelines, refineries and coal activities. In respect of oil pipelines, it is proposed that all new equity of PARCO will be inducted from Private Sector in consultation with the joint venture partner M/s ADNOC. Thus the new capital investment of PARCO increases, it will gradually become a private sector company. Other new pipeline projects are proposed to be structured in such a manner that they would be attractive for the private sector.

46. As regards coal sector, bulk of coal mining and exploration is being done in the private sector already. However, the level of physical activity and financial investment is far below the desired level. The coal development policy has already been described in the preceding paragraphs.

Pricing Policy

47. Some aspects of pricing policies with regard to producers of oil and gas, refineries, electricity, transporters and consumers have already been briefly described in the earlier text. Further details of the pricing policies and strategies are given below.

(i) *Producer Prices of Oil and Gas*

48. The producer prices of oil and gas have the following objectives :

- a) *Oil*: The price for Crude Oil delivered at the refinery gate shall be based on the C&F price of a comparable crude oil or a basket of Arabian/Persian Gulf Crude Oils plus or minus a quality differential between the basket and the local crude. No other adjustment or discount will apply.
- b) *Condensate*: The price for Condensate will be the FOB price of internationally quoted comparable Condensate. No other adjustment or discount will apply.
- c) *Non-Associated Gas*: The price for Non-Associated Gas will be indexed to the C&F price of a basket of imported Arabian/Persian Gulf Crude Oils as follows:

Zone 1	77-1/2%
Zone 2	72-1/2%
Zone 3	67-1/2%
- d) *Associated Gas*: The price for Associated Gas shall be equal to the price of Non-Associated Gas as applicable to each Zone for acceptable gas specifications.
- e) *Liquefied Petroleum Gas*: The current LGP producers will be given incentive for incremental production over currently committed levels, which come on stream after the announcement of this Policy, through a higher price(FOB) subject to a maximum of US\$ 175 per metric ton. For new projects, C&F parity prices, based on proper port off-loading facilities, will be allowed.
- f) *Fixed Return Formulae*: Application of fixed return formulae to the industry will be progressively changed to market related formulae. A study to review and determine the implications and modalities of this change will be undertaken and completed by December 31, 1995.

(ii) *Refinery Prices*

49. The pricing for new refineries will be based on the import parity formula. Prevalent inland freight for products will be added for upcountry refineries based on imported crude oil. New refineries based on indigenous crude or offering definite logistic advantage will be ensured a minimum rate of return of 25% on the paid up capital net of tax for eight years if set up by the year 2000.

(iii) *Consumer Prices*

50. The objectives for consumer prices are as follows :

- a) Recovery of the cost of service and profit by the supplier.
- b) Promotion of rational use of energy (appropriate fuel choices, conservation etc.).
- c) Load management (peak, off-peak prices, etc).
- d) Self-generation of funds for expansion programmes of utilities.
- e) To meet the conditionalities of donors/lenders.
- f) To address socio-economic concerns.
- g) To minimize economic cost of use of Energy.
- h) To provide continued budgetary support.

51. The following is the basis for determining consumer prices :

(iv) *Oil Product Pricing*

- a) The fundamental principle would be to recover all the costs alongwith suitable profit and atleast maintain the budgetary support from the sale of oil in the market.
- b) Due consideration would, however, be given to socio-economic needs while structuring the tariffs.

(v) *Gas Prices*

- a) The principle for determining the price of natural gas would be to relate it with the price of fuel oil and to ensure that overall average price of natural gas is at or above par with the domestic price of fuel oil for industrial, commercial and power sector consumers and border price of fuel oil for the domestic sector. As regards the price of gas for the fertilizer sector, price for feedstock use is proposed to be determined as per contractual commitments.
- b) Price slabs of natural gas for the domestic sector would be structured so as to reduce the tendency for extravagant consumption. Further, in order to promote off-peak consumption and load management, a system of seasonal tariffs would be considered.

- c) At present gas prices are determined on the basis of volume (per MCF). This system is proposed to be changed and to made more scientific i.e. the price would be related to the heat content (BTU per MCF).

(vi) *Electricity Prices*

- a) The fundamental principle for electricity prices will be to ensure recovery of all costs (fixed and variables) and to enable generation of 40% of funds for WAPDA's development programmes in accordance with a detailed formula. In the case of KESC the policy would be to continue to achieve self-financing of 15% in 1994-95, 20% in 1995-96 and 25% in the subsequent years of Eighth Plan.
- b) The tariff would continue to have three components :
- Fixed
 - Energy charge
 - Fuel adjustment charge (FAC).
- c) At present a number of categories of consumers are either not paying FAC or pay a fraction of the FAC. During the Eighth Plan, gradual adjustments would have to be made to widen the base of recovery of FAC.
- d) Tariff slabs would be structured to promote energy conservation, efficiency and rational use. Time of day and seasonal tariffs would also be introduced for certain categories of consumers.
- e) The present bulk rates of tariff would be reviewed and adjusted so as to promote private distributors.

(vii) *Prices for Transmission/Transportation of Oil & Gas*

52. Both SNGPL and SSGC have been given pricing formulae related to their returns on the net fixed value of the assets (17.5% for SNGPL and 17% for SSGC) thereby providing an incentive for system expansion. Further, commercial and market related improvements in the formula would be carried out in due course.

53. For pipeline projects, thruput charge equal to railway freight would be offered for new white oil pipeline projects. Black oil pipeline projects would be allowed to generate a 20% rate of return on paid up capital in excess of the railway freight. The incentive would be valid for projects set up within next 5 years.

Renewable Energy Policies

54. On the basis of available information, it has been estimated that most of the renewable energy is obtained by burning biomass (crop residue, fire wood, shrubs, cow dung, etc). Around 90% of the biomass is to be consumed by the household sector. Energy supply from other forms of renewables (other than major hydels) such as solar, wind, biogas and geothermal, etc. are negligible.

55. A detailed survey of energy used by households was carried out under the aegis of Energy Wing/World Bank/UNDP in 1992. Detailed policies and strategies based on its data, which is more reliable, are being formulated. For the present, following are the principles of the energy policy for renewable energy resources:

(i) *Biomass*

- a) Promotion of forestry and increase in the availability of biomass.
- b) Improvements in efficiencies of utilization of biomass (such as increase in efficiency of cook stoves, etc.)
- c) Promotion of better utilization and distribution practices of crop residues.
- d) Improvement in the market structure for fire-wood and crop residues.

(ii) *Other Renewable (Solar, Wind, Biogas, etc.)*

- a) In view of high capital costs of solar and wind systems and the resource constraints, the policy during the Eighth Plan would be continued emphasis on demonstration and utilization of these sources of energy in far flung areas where conventional sources of energy are not readily available. In general, demonstration and promotion of renewable energy technologies would be the responsibility of the organizations responsible for delivery of conventional energy. Pilot scale systems would be established in far flung areas rather than small installations near the urban areas as in the past. Some integrated projects (hybrids of wind, solar, diesel, etc.) would be established and operated by the agencies such as WAPDA so that the cost of maintenance is also reduced as well as the locations of the plants can be coordinated with the programmes of transmission development and isolated diesel generating sets. Similarly solar water heating will be promoted by gas and oil companies.
- b) For wind Energy, a wind resources programme would be initiated so that specific projects can be formulated depending upon the wind regime.
- c) Imports of equipment for use of renewable energy would be considered for taxes and duty exemptions.

Import of Energy

56. To diversify from oil imports, options of imports of other forms of energy such as gas including LNG, coal and power will be objectively assessed. Economically and financially viable projects would be undertaken preferably in the private sector.

Institutional Development

Human Resource Development

57. The key elements of policy would be as follows:

- i) To ensure successful implementation and operation of the recommended Energy Sector Programme, steps would be initiated by energy sector organizations and utilities for overhauling their training programmes, institutional reinforcement of the formations responsible for training, and upgrading their training center facilities. Simultaneously these organizations would establish a working relationship with engineering universities and polytechnic institutes so that their educational programmes can be tailored to the qualitative and quantitative requirements of the energy sector.
- ii) Continued emphasis on strengthening of institutions for energy planning and project implementation and necessary augmentation to meet the requirements of the new policies. Mandatory publishing of category-wise manpower requirements by energy sector agencies for a ten year period to enable systematic manpower education and planning.
- iii) Restructuring the sector to encourage and regulate private and public sectors effectively.
- iv) Creating capability and augmenting to examine policies, strategies, studies, coordinating and monitoring of energy related environmental aspects.
- v) All projects may provide 0.1% of the project cost towards improving undergraduate engineering education in energy related disciplines in the country. This fund would be supervised by a committee under the Energy Wing, comprising of beneficiaries and energy entities.
- vi) A suitable amount of the total allocation for Energy Sector to be set aside by each energy entity for R&D activities related to the Energy Sector. The nature of these activities would, however, be applied, job related or support of activities for enhancing self reliance and indigenous technology in existing institutions.

Indigenization in Manufacturing

58. Maximum emphasis would be laid on manufacturing of energy sector equipment in Pakistan. Following specific measures are proposed:-

- i) Efforts would be made to standardize the Design and size of a suitable Power plant and participation of the local industries in the manufacturing of the plants (partially or wholly) would be promoted. WAPDA would adopt standardized designs of the plants and make it publicly known to promote indigenous manufacturing.
- ii) Capability of State Engineering Corporation (SEC) and its units will be augmented to increase the local share of manufacturing of equipment.
- iii) WAPDA and KESC will maximize indigenous content in power plants. Further, special edge would be given to local component of manufacturing content.
- iv) NDFC would finance facilities and equipment manufactured locally. Similarly, other financial support would be organized to assist the local manufacturing industry.
- v) Joint ventures with foreign companies would be encouraged.
- vi) Import of turn key projects would not be ordinarily allowed.

SECTORAL PROGRAMMES

I. Power

(i) Power Demand

59. The natural unrestricted rate of growth of demand for electricity in Pakistan is estimated to be in the range of 11% to 12%. However, in view of various physical, financial and technical constraints limiting the rate of system expansion, the total demand for power in areas having access to electricity is projected to increase at an average rate of around 8.8% per annum. Accordingly, demand projections for combined WAPDA and KESC system are as follows:-

Year	Potential Peak demand (11% growth)	Restricted Peak Demand (8.8% Growth)
-----	-----	-----
1993-94	9100 MW	9100 MW
1997-98	13900 MW	12800 MW
2002-2003	23500 MW	19500 MW

60. The power demand with demand side management and energy loss reduction and sectoral efficiency programme for 8th Plan is summarised in Table 6.6.

Table 6.6
National Peak Demand

Current Demand (1993-94) 9127 MW

Natural growth Rate 11%

YEAR	GROSS DEMAND (MW) 11%	IMPROVEMENT THROUGH (LOSSES)	IMPROVEMENT THROUGH DEMAND SIDE MANAGEMENT	NET DEMAND
-----	-----	-----	-----	-----
1993-94	9127	-	-	9127
1994-95	10131	116	320	9695
1995-96	11245	245	755	10245
1996-97	12482	390	1346	10746
1997-98	13855	535	2147	11173
-----	-----	-----	-----	-----

(ii) Generation Programme

61. With the introduction of demand side management and Energy loss reduction and operational improvement measures, the total requirement for additional generation capacity over the next five years would reduce from 7000 MW to around 5000 MW. In view of public sector resource constraints, it is recommended that WAPDA/KESC should focus on the completion of the ongoing projects involving installed capacity of 2400 MW during the next five years, whereas at least 2500 MW of new projects should be implemented in the private sector under the BOO/BOOT scheme. In addition 500-600 MW of co-generation capacity should be developed in the industrial sector over the next five years, particularly in sugar, textile and cement.

62. The core investment programme for generation in the public sector is given in Statistical Appendix Table III-6.6. Vigorous efforts would be launched to identify and select additional power projects in the private sector, including new thermal projects, as well as some small to medium sized hydro project. Similarly, new industrial co-generation project totalling 200 to 250 MW are expected to be initiated every year during the period 1994-96 and beyond, in order that the requisite private power generation capacity can be on bars by 1997-98.

63. The public sector core investment programme would be reviewed periodically depending upon the progress of private sector BOO and industrial co-generation projects. Any core project in which the Private sector exhibits interest should be partially divested in accordance with the concept of public-private partnership.

64. Additional projects in the private sector which might be commissioned during the Eighth Plan have been identified and are in Statistical Appendix Table-III-6.3.

65. In order to develop a portfolio of possible sites for both private and public sector generation projects, it is proposed to initiate a study on preliminary investigations and ranking of sites for thermal generation. These investigations will facilitate systematic investment.

66. It is recommended that projects listed in Statistical Appendix Table-III-6.2 should form the Core Investment Programme for generation in the public sector. In addition, out of the private sector BOO projects proposals currently filed with GOP, listed in Statistical Table III-6.3, financial closure of about 700 MW of steam plants by September, 1994 and another 600-800 of diesel engine/combustion turbines or combined cycle plants by March 1995 (beside the 1292 MW Hub project) must be achieved.

67. Based on the present commissioning schedules of public/private projects, the revised demand growth projection, and assuming about 80-85% success in development of private sector targets, the overall power demand supply situation is expected to evolve as given in Table 6.7.

Table 6.7

YEAR	DEMAND PROJECTION (WITH DSM) (MW)	INSTALLED CAPACITY (PUBLIC SECTOR) * (MW)	INSTALLED CAPACITY PRIVATE SECTOR (BOOT & IND.) (MW)	TOTAL INSTALLED CAPACITY * (MW)	PEAK DEFICITS/MIN. SURPLUS (MW)	
1	2	3	4	5	AVERAGE YEAR	DRY YEAR
1993-94	9127	11729	0	11729	-1000	-1900
1994-95	9695	13075	0	13075	-800	-1700
1995-96	10245	13585	300	13885	-400	-1300
1996-97	10746	13585	2000	15585	-150	-950
1997-98	11173	13585	2700	16285	+250	-650

* Excluding 137 MW KANUPP.

68. With this scenario, deficits ranging between 400 and 1000 MW (4 to 11% of peak demand) will persist during the first three years of the 8th Plan period, after which the system will move to a situation where supply-demand balance will more or less be achieved (for average water inflow conditions). In case of dry year (low water inflows) shortages of upto 1300 to 1900 MW (13 to 21% of peak demand) during the Ist three years and of 700-1000MW (7 to 10% of peak demand) during the last two years of the Plan may be encountered.

69. It should be noted that the success of the programme is hinged on forceful and effective implementation of demand management measures. The recommended generation programme is essentially a hard core programme based on managed demand growth projections.

(iii) *Primary Transmission Programme*

70. The transmission programme has been prepared keeping in view the power generation programme to enable efficient transmission of electricity to load centres. It is recommended that WAPDA/KESE should undertake technical studies to look into the possibility of introducing state-of-the art technologies like FACTS and SVS as an alternative to construction of additional transmission lines. Major transmission projects are given at Statistical Appendix Table III-6.4

(iv) *Secondary Transmission*

71. Under the Secondary Transmission and grid station programmes, a large number of new areas are proposed to be opened up to electrification, bringing the prospects of improvement in quality of life and heightened economic activity of the people of these regions.

(v) *Distribution Programme*

72. The distribution expansion programme for 8th Plan for both WAPDA and KESC envisages expansion of the network to provide electricity to about 3.1 million new consumers in urban and rural areas in addition to the 9.3 million existing consumers as follows:-

Categories	(000)		
	Urban	Rural	Total
Domestic/ Commercial	1252	1777	3029
Industrial	22	30.1	52
Agricultural	3.6	31.6	35.2
Others	1.5	0.8	2.3
Total:-	1279.1	1839.5	3118.6

II Oil and Gas Sector

73. The Eighth Plan envisages increase in indigenous production of oil from about 60,000 barrels per day to 123,317 barrels per day and gas production from about 1600 MMCFD to 2554 MMCFD. Most of the oil fields discoveries so far are small structures, some of which are already on the decline. Therefore, the production targets are based on modest estimates. In the gas sector, substantial increases would be possible because of increase of transmission capacities as well as development of new fields. It is hoped that in the light of the policies described earlier the sector will attract greater investment and the physical and production targets would be exceeded.

(i) *Upstream Activities*

74. Summaries of the programmes submitted by OGDC and DGPC for public and private sector activities are given in the following Tables.

Table 6.8
Projected No. of wells

Agency	7th Plan Target			Achievement	8th Plan		
	Expl.	Dev.	Total		Expl.	Dev.	Total
OGDC	65	100	165	123	70	110	180
DGPC (Private Sector)	60	150	210	94	72	98	170
Total	125	250	375	217	142	208	350

Table 6.9
Oil Production *

Agency	7th Plan Targets	Achievements	Bbls/day
			8th Plan
OGDC	32710	25916	52230
DGPC (Private Sector)	43290	34048	71087
Total	76000	59964	123317
			**
Rounded off	76000	60000	123300

* The figures are for the last year of the Plan.

** Total production for the 8th Plan includes 47,386 BOPD from the existing fields, 13,437 BOPD from enhanced oil recovery projects and 58,310 BOPD from the expected discoveries.

Table 6.10
Gas Production *

Agency	7th Plan Targets	Achievements (Average)	MMCFD
			8th Plan (Peak)
OGDC	282	268	811
DGPC (Private Sector)	1813	1330	1743
Total	2095	1598	2554
			**
Rounded off	2095	1600	2550

* The figures are for the last year of the Plan.

**The estimates will change with any change in fields behaviour.

(ii) *Downstream Activities**Refining Capacity:*

75. The existing refinery capacity and plans are summarized below in Table 6.11.

Table 6.11

Refinery Plants	Capacity Million Tonnes/ Annum	Commissioning Date	Expansion in Crude Throughputs of Existing Plants
Existing Refineries			
NRL	2.8	-	Though no capacity increase is being contemplated, balancing, modernization and energy conservation projects would be undertaken.
PRL	2.13	-	0.49 million tonnes/ annum in 1994-95 and 0.17 million tonnes/annum in 1995-96.
ARL	1.4	-	0.55 million tonnes/annum in 1994-95 and 0.3 million Tonnes/ annum in 1996-97.
	----- 6.33 -----		----- 1.51 -----
New Refineries			
Dhodak Topping Plant	0.1	1994-95	
Hydrocracker	1.6	1997-98	
Iran-Pak Refinery	5.8	1998-99	
Multan Refinery	4.5	1999-2000	
Refinery in South* (based on indigenous)	1.5	N.A	
Total	13.5		

* Location and capacity subject to a detailed feasibility study.

76. It may be seen that a large addition in refinery capacity is being proposed. However, only refineries that can break-even will actually come on stream or continue to operate. The screening of the available proposals has not been made at this stage.

(iii) *Oil Logistics*

77. The biggest bottleneck in the movement of petroleum products is the geographical location of the ports and long lead time as products have to be moved to the consumption areas upcountry. The products are presently being moved through pipeline rail and road tankers. Currently there is one white oil pipeline of 4 million tons per annum capacity which will increase to 6 million tons per annum this year. The remaining quantity is being moved by rail and road. The movement of oil by road is highly undesirable as it not only involves higher transportation cost, consumption of more energy but also ruins the roads and create traffic congestion. Accordingly following projects are recommended:-

- i) A mid-country refinery by PARCO alongwith a crude oil pipeline of 5 million tons per annum capacity by the year 1999.
- ii) Second white oil pipeline from Karachi to Multan to be commissioned by 1998.
- iii) A furnace oil pipeline from Karachi Port Qasim to Jamshoro by 1995, to meet the furnace oil requirement of Jamshoro power station as well as other thermal power station upcountry by movement of the product by rail with establishment of railways yard facilities at Jamshoro utilizing un-utilized railway track on the right bank of river Indus.
- iv) A pipeline from Port Qasim to Hub Power Station by 1996.
- v) Extension of existing PARCO pipeline from Multan to Faisalabad and Machike by 1996 (currently under implementation).
- vi) Construction of 900,000 tons of strategic storage by year 2000.

(iv) *Gas Transmission and Distribution*

78. The plans for gas transmission and distribution are summarised below:-

- a) *Transmission:* At present SNGPL and SSGC are the two main gas companies in northern and southern part of the country. Besides, WAPDA owns Sui-Guddu, Mari-Guddu and Kandkot-Guddu pipelines. The present capacity of SNGPL system ex-Sui is 450 MMCFD and SSGC is 380 MMCFD. The SNGPL system also has about 100 MMCFD of additional capacity ex-Potowar area. The Eighth Plan envisages increase in the capacity of SNGPL system from 550 MMCFD to 880 MMCFD under ongoing project of SNGPL VI. Besides, pipelines would be laid from Dhodak to Kot Addu and from Qadirpur to SNGPL system to inject gas available from these fields in the SNGPL system. SNGPL's system capacity will be further expanded to receive 140 MMCFD from Qadirpur.

SSGC has proposed to lay a pipeline from Kandanwari field to the existing network and extended to Karachi via Nawabshah. The capacity of the pipeline would be 140-160 MMCFD. Besides, the transmission capacity from Shikarpur to Quetta would be increased from 28 MMCFD to 100 MMCFD by adding compression and pipeline loops.

- b) *Distribution:* The Eighth Plan would make a bold departure from the past approach of distribution of gas by according a very high priority to meeting the demand for natural gas in existing as well as new areas. It is proposed to supply gas to 81 new towns. It is proposed to increase the number of gas connections in SNGPL from 9.4 lakhs in 1992-93 to 16.3 lakhs in 1997-98. In SSGC system the corresponding figures would be 9 lakhs and 16.4 lakhs respectively.

79. A detailed master plan would be developed by the companies for both distribution expenses and lines for new areas such as on the right bank of river Indus. This would also take into account likely import or higher availability of gas. SSGC's programme also makes provision for trans-Baluchitan pipeline and compressors for this purposes.

(v) *Liquified Petroleum Gas (LPG)*

80. The estimated production of LPG from various fields and refineries during the 8th Plan is given below:

Table 6.12

L.P.G. Production (Metric Tons/Day)

	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98
From Refineries						
- ARL	25	25	25	25	25	25
- NRL	42	42	42	42	42	42
- PRL	45	45	45	45	45	45
Sub-Total (Refineries)	112	112	112	112	112	112
From Gas Fields *						
- Meyal	60	60	60	55	55	55
- Dhurnal	85	38	38	0	0	0
- Dhakni	12	10	10	18	18	18
- Adhi	60	60	60	60	60	60
- Dhodak	0	0	170	150	150	150
- Badin	0	0	0	200	200	200
Sub-Total (Gas Field)	217	168	338	483	483	483
Total Production:	329	280	450	595	595	595

Source: DG (Gas)

* Additional availability is also expected from Missa Kaswal and Ratana fields and from Iran-Pak Ref.

81. Under the new Petroleum Policy, the producer price of LPG will be linked with international price with appropriate discount. The import of LPG has also been allowed. Depending upon the price, supply arrangements for far flung areas and acceptability for greater uses in domestic and transport sectors, the demand of LPG may further increase. If the demand increases the domestic supply, it can be met by import for which various companies are already preparing feasibility studies.

(III) Coal Sector

82. Under the Constitution, coal is exclusively a Provincial subject. Accordingly, broad principles and programmes are described here whereas Provinces are expected to prepare detailed programmes in the Eighth Plan. Coal mining is being done both by public and private sectors with the latter being dominant with about 85% of the share of the mining activity.

(i) *Exploration*

83. The Geological Survey of Pakistan (GSP) carries out exploratory drilling besides various surveys and studies in consultation with the Provinces. The programmes proposed to be undertaken by GSP are summarized below:

GSP

A: Regional geophysical surveys	10,000	sq.kms
B: Geophysical surveys of designated coal tracks.	500	sq.kms
C: Exploratory drilling at 2-4 KMS distance.	90	holes

84. The possible location of exploratory drilling and regional survey may be Thar-Badin (Sindh), Makerwal, Jhang and Cholistan in Punjab, Hangu-Urakzai, Karak, Cherat and Landikotal in NWFP, Pir Ismail Ziarat and Much Abe-Gum in Balochistan.

(ii) *Coal Resources Confirmation*

85. In the past, the resources identified by GSP have not been evaluated and confirmed through closed space drilling so as to enable offering of mineable blocks to private sector for mine development. As such, a gap exists between activities of coal exploration and development. In the Eighth Plan it is proposed to address it by including a programme of closed space drilling (at 1 Km distance) of 830 holes by GSP. Effort would also be made to encourage private sector to carry out closed spaced drilling under the concession agreement. No specific target can, however, be set for private sector at this stage.

86. The Close spaced drilling will be largely undertaken by GSP in Thar-Badin, Sonda, Lakhra, Jhimpir coal fields, and Salt Range, Cholistan Khost-Sharigh, Mach, Ismail-Ziarat and Hangu, Urakzai, Karak, Cherat, Landikotal. A Coal Confirmation Wing will be created in GSP to carry out drilling on systematic lines. However, it may not be possible for GSP to drill all holes departmently, and therefore it is envisaged that contract drilling may be undertaken to supplement GSP's capabilities.

87. Regarding the private sector, it is proposed to make specific packages for large coal finds such as in the Thar-Badin areas for attracting investments for coal prospecting, confirmation and development under concession agreements within the framework of the coal policy already described in the text.

(iii) *Promotion of Coal Exploration*

88. For promotion of exploration of coal, it is planned to enhance the capabilities and institutional effectiveness of Geo-data Center. It is proposed to organize it to play an effective role in systematic storage and dissemination of data and publishing of promotional brochures for attracting private investment. Once the resources are confirmed, these would be made available for development under the aegis of Provinces.

(iv) *Mine Development*

89. Lakhra Coal Mine Development Company (LCDC) has already been formed with the participation of Sindh province, WAPDA and PMDC holding shares in the ratio of 20%, 20% and 30% respectively, while the remaining 30% would be offered to the private sector. It is expected that this company would start functioning during the 8th Plan and mines would be developed in the Compact and Northern blocks of Lakhra coal field to supply 1.5 million tonnes of coal for 6x50 MW (FBC) power plants by 1997-98. In addition, existing coal mines at Degari, Sor-Range, Sharigh (Balochistan) and Makerwal (Punjab) shall be mechanized. Development of new mines at Meting will also be undertaken.

90. As the bulk of the mining operation is in the private sector, mine-wise projects of the private sector are not available at this stage. However, it has been assumed that the private sector would contribute a major share in coal supplies.

(v) *Provincial Programs*

91. Newly formed Sindh Coal Authority shall be responsible to develop coal resource and mines at Thar-Chachro, Sonda-Thatta, Badin and Lakhra coal fields. Punjab Mineral Development Corporation plans to develop new mines at Khajula, Maghal and expand Dandot collieries. Other provinces are expected to set up their own Coal Development Agencies.

(vi) *Coal Production*

92. The production (including un-reported) of coal for 1990-91 was 5.63 million tonnes. It can be expanded upto 10.52 million tonnes given a coordinated approach to confirm and mine resources by both private and public sector. The production target set for the Eighth Plan is 10.52 million tonnes.

Energy Conservation

93. The policy contents of the programme for energy conservation have already been described in the preceding paragraphs. Specific programmes are briefly given below:

(i) *Power Factor Improvement Programme*

94. WAPDA has plans to install capacitors at the consumer end to improve power factor. Depending upon the success of the programme, consumers who are paying penalties would be provided with the capacitors.

(ii) *Energy Efficiency Lighting Programme in the Commercial Sector*

95. Currently lighting consumes 30% of the electricity consumed in the commercial sector. This can be reduced by 83% by use of the energy efficiency lighting. A programme for fluorescent lighting would be implemented.

(iii) *Water Pumping Efficiency Improvement*

96. There are about three lakh electric and diesel tubewells in the country. The average efficiency of the tubewell is 5 to 7%. Estimates shows that efficiency can be increased by 15 to 20% by retrofitting and 35% by improving the pump design. For the Eighth Plan it is proposed that a programme of tubewells retrofit would be launched.

(iv) *Industrial Boiler Replacement Programme*

97. The average fuel efficiency of about 3000 industrial boiler in the country is about 70%. There is scope to increase the efficiency by 10-15% by boilers replacement programme. It is proposed to replace 1500 low efficiency boilers during the Eighth Five Year Plan.

98. Besides the above programmes, it may be stated that WAPDA plans to reduce its losses from 23.2% to 18.5% and KESC from 33.6% to 19%. Further the refineries namely PRL, ARL and NRL have their own programmes of efficiency improvement and rehabilitation. WAPDA will also carry out the study of O&M practices in their thermal power stations with a view to improving their efficiencies (A programme to rehabilitate the existing thermal power stations has recently being completed in WAPDA system).

Energy Sector Targets and Investments

Federal Portfolio

99. The Energy Sector targets and investment estimates for the Eighth Plan have been made on the basis that all ongoing projects get the highest priority and a large share of development effort has been left to the private sector. The investment programme in the public sector is essentially the minimum programme (core programme) which would be supplemented by the private sector.

100. The Eighth Plan envisages an allocation of Rs. 44.837 billion for the Energy sector through the budget. Besides, it is estimated that an investment of Rs. 257.186 billion would be made by the public sector outside budget, besides the private sector investment of Rs. 335.067 billion. The investment for the latter would depend upon the performance of the private sector in response to the Government policies. The investment in Public Sector might have to be increased depending upon decisions for major hydel.

101. Sector-wise summary of the targets and investment programme is given at Statistical Appendix Table III-6.5 and III-6.6 respectively.

III-7

TRANSPORT AND COMMUNICATIONS

Policy Initiatives

The acceleration in the tempo of development activities and the consequent demand for mobility consistently increases the pressure on the Transport and Communication system which requires continuous rehabilitation, expansion, updating and modernization as an integrated system. Transport and Communication system has not in the past received the priority it deserves. This resulted in inadequate capacity improvement, arrears of replacement of overage assets and general deterioration in the quality of services. In the Railways sub-sector huge arrears of depreciated assets has piled up. In the roads sector condition of roads has deteriorated and capacity constraints have put the system to strain. In the telecommunication lack of investment has resulted in capacity constraints, huge backlog of demand and general deterioration in the quality of service. On the other hand the demand for mobility and consequent pressure on the existing transportation infrastructure has been increasing due to the increase in investments in other sectors of the economy. To overcome the problem and to cater for the pressing requirement, the Eighth Plan Policy for the establishment of a comprehensive transportation system would be based on the following parameters:

- i) The rationale for inland freight traffic between rail and road network would be that the Railways should haul long lead traffic and roads should carry short lead traffic;
- ii) A significant shift of freight traffic to Railways to achieve maximum utilization of its inherent capacity would be necessary to reduce relative transportation costs;
- iii) Privatization of Railway's operations in selected areas would be explored;
- iv) Commercial exploitation of Railway Lands and property development will be carried out;
- v) In the road sub-sector, the highway development programme would be broadened by induction of the private sector and the realization of road user charges;
- vi) Toll roads would be developed and all those sections on National Highway which are either newly constructed or improved will be tolled;
- vii) The port facilities would be developed for containerization of traffic with the help of dry ports and bonded warehouses;
- viii) Private sector would be given incentive for participation in the shipping and ports sub-sectors;

- ix) The Karachi Shipyard and Engineering Works would be re-vitalized by modernization;
- x) Induction of Private Sector in the Airlines would be encouraged;
- xi) New Air Terminal projects at Islamabad, Lahore and Peshawar would be implemented through the private sector on Built Operate and Transfer (BOT) basis;
- xii) Induction of the private sector in the development programme of Telecommunication facilities would be accelerated; and
- xiii) Establishment of multimodal Transportation system would be studied and developed.

Traffic Forecast

2. Traffic forecasts for the Eighth Five Year Plan are based upon an integrated system approach and the following major elements:-

- i) The inland traffic is projected to grow from 43,400 MTKM of freight and 155,771 MPKM of passenger traffic in 1992-93 to 50,240 MTKM of freight and 177,413 MPKM of passenger traffic in 1997-98 at the annual growth rates of 2.97 per cent and 2.64 per cent respectively.
- ii) Assignment of traffic to different modes of transport is made in accordance with the least cost solution to maximize the benefits to the economy. During the Fifth Plan there was a marked shift in traffic from rail to road. Continuation of this trend over a long period would involve extra transportation cost to the economy. In addition, it would involve higher investment for improvement and strengthening of the existing road network. It will also require an extra capital cost for the procurement of additional vehicles. A reversal of this trend, by greater shift of freight traffic back to the Railways, would help in better utilization of the inherent capacity of the Railways and it will provide the most effective and energy efficient solution, from the national point of view. The long term (by the year 2006) objective is to achieve freight traffic distribution in the ratio 27:73 between rail and road. Thus, the strategy adopted from the Sixth Plan aimed at reversal of the trend and movement towards the achievement of this target. But both the sixth and the seventh plans could not achieve the targets and as a consequence the actual ratio fell to 14:86 in 1990-91 and 15:85 in 1992-93. This has been mainly due to the inability of the railways to carry the assigned share of freight traffic. Even the long haul freight traffic was diverted to the relatively uneconomical mode of transport by road. The main stress during the Eighth Plan would, therefore, be on the railways to carry its due share of freight traffic by optimum utilization of its capacity.

3. Traffic demand forecasts, based upon the above methodology, for the different modes of transport are tabulated below:

Projection of Transport Demand

Unit	Benchmark 1992-93	Targets 1997-98	ACGR %
Railway			
Freight(Million Tonne Km)	6,400	9,850	9.0
Passenger(Million Passenger Kms.)	20,771	22,932	2.0
Road Freight(Million Tonne Kms)	37,000	40,390	1.8
Passenger(Million Passenger Kms.)	135,000	154,481	2.7
PORT			
Dry Cargo (Million Tonnes)	11.1	13.00	3.21
Liquid Cargo (Million Tonnes)	11.5	14.4	4.8
Steel Mill (Million Tons)	2.6	2.7	0.8
AIR			
Domestic			
Passenger MRPKS	2,737	4,006	7.9
Freight MRFTKS	42	53	4.8
International			
Passenger MRPKS	7,739	9,741	4.7
Freight MRFTKS	449	522	3.1
PIPE LINE			
Million Tonne Kms.	1,700	1,700	

4. The Eighth Plan policy and strategy for different sub-sectors in Transport and Communications is given in the subsequent paras.

I. RAILWAYS

5. Pakistan Railways is targeted to carry a freight traffic of 9850 MTKm by the year 1997-98. This will improve the rail:road modal split for freight traffic from 14:86 in 1990-91 to 20:80 in 1997-98.

6. The following policy and strategy is proposed for the Pakistan Railways development programme in the Eighth Five Year Plan:-

- i) maximizing the net benefit to the economy by revitalizing the Railway's Role in transportation and capacity optimization;

- ii) rehabilitation and improvement of the existing infrastructure to realise the inherent capacity of the Railways;
- iii) losses on Railways operation will be minimized by closing unremunerative lines where strategic and other considerations do not warrant, cancellation of trains will be done where there is no potential for improvement and fare rationalization;
- iv) a flexible policy for rates and fares will be followed whereby freight rates could be varied according to the type of commodity as well as direction. Contracts would be entered with producers of cement & fertilizer to ensure high rated commodities traffic even during the lean periods;
- v) improvement of the overall efficiency of the Railways through better management information systems and managerial and operational techniques. Cost reduction measures will be adopted to enable the Railways to operate as a viable commercial enterprise by charging fares on commercial lines, closing of unremunerative lines and reduction of staff;
- vi) allocation of traffic between rail and road to be made according to the suitability of traffic for the two modes i.e. long haul for rail and short haul for road;
- vii) goods traffic which is more paying to be accorded priority in locomotive power and importance over passenger services particularly on branch lines;
- viii) overall improvement of the track particularly on the main routes to lift permanent speed restrictions ; and rehabilitation of rail link with Iran;
- ix) the remaining large manufacturing units of Railways will be converted into autonomous organizations;
- x) Railways and N.L.C. will work in complement rather than competition to facilitate and economize on the intermodal movement of goods traffic; and
- xi) Railways and N.L.C., wherever possible will go into joint ventures on infrastructure projects.

II. PORTS & SHIPPING

7. The dry and liquid cargo is projected to increase from 25.2 million tons in 1992-93 to 30.1 million tons in 1997-98 at an ACGR of 3.6 per cent. The port traffic forecasts for the Eighth Plan are given in the table below:-

(Million Tons)			
Type of Cargo	Benchmark 1992-93	Projections 1997-98	ACGR %
General Cargo	6.2	8.0	4.9
Dry Bulk Cargo	4.8	5.0	0.8
Liquid	11.5	14.4	4.8
PSM Cargo	2.6	2.7	0.8
Total	25.2	30.1	3.6

The containerized traffic will steadily increase. About 74 per cent of general traffic was carried in containers in 1992-93. By 1997-98 about 85 per cent of general traffic is expected to be carried in containers. The container traffic is projected to increase to about 623,000 TEUs at an ACGR of 7 per cent by 1997-98.

8. The following strategy is proposed for the Ports development programme during the Eighth Five Year Plan.

- (i) A Central Ports Authority would be created to coordinate the operations of Port Qasim and Karachi Port;
- (ii) The throughput of the Ports would be augmented by Private/Public Sector efforts through improvement of facilities for receiving deep draft vessels, provision of quick cargo handling equipment, mechanization, computerization of services for fast facilitation, security & safety of goods in transit, creation of Support Systems for round-the-clock and round-the-year uninterrupted operation of Ports and expansion of national tonnage in Shipping Sector;
- (iii) Container handling berths at Port Qasim and the Karachi Port to be provided and properly equipped with gantry cranes and other container handling equipment;
- (iv) Inland container freight stations to be developed at the strategic industrial and commercial locations so as to enable multi-modal operation of containers from the premises of the shippers to the premises of the consignees without stuffing and destuffing of the containers at ports;

- (v) The Port facilities would be backed up and augmented with intermodal infrastructure for maximum utilization of containerization. Pakistan Railways would be geared to receive and transport the containers away from main sea ports to the Inland Container Depots expeditiously;
- (vi) Construction of deep sea port at Gwadar through private sector.
- (vii) Private Sector to be encouraged to participate in port infrastructure. Container terminal and oil terminal at Port kasim to be constructed by the private sector;
- (viii) Private sector participation in cargo handling to be encouraged;
- (ix) Customs and KPT procedures and documentation to be simplified to ensure quick clearance of containers and multi-model operations;
- (x) Facilities to be developed for the protection of marine environment of Pakistan from pollution; national contingency plan for dealing with large oil spill emergencies along the coast of Pakistan to be prepared;
- (xi) The present port facilities to be consolidated by greater emphasis on balancing, modernization and replacement of machinery & equipment to achieve improvement in throughput;
- (xii) The Merchant Shipping Act, 1923 would be revised and enacted at the earliest; and
- (xiii) The KPT Act, 1886 would be revised and enacted.

III. ROADS

9. Pakistan has about 167,328 Km of all types of roads giving the average density of 0.21 Km per Sq Km. which is far less than the generally accepted standard of 0.5 Km per Sq Km for developing countries with similar topography and level of economic development. The system deficiency is therefore of the order of 230,720 Km. Moreover, the road coverage is not uniform and there are vast pockets which are completely devoid of even the basic communication facilities. The proportion of sub-standard roads is very high.

10. The following strategy is proposed for the Eighth Plan:-

- (i) The main thrust of the Eighth Plan road development programme would be directed at the improvement/upgrading and filling up of the gaps in the existing road network with a view to optimally utilizing the system for speedy economic growth;
- (ii) Highest priority will be accorded to proper maintenance of the existing road network based upon the Pavement Management System (PMS). Shortfall in maintenance would be met through formulation of special maintenance programmes as part of the development budget;

- (iii) New roads would be constructed so as to extend coverage to the isolated and far flung areas or for development of alternate links;
- (iv) The Lahore-Islamabad Motorway project would be completed during the plan period;
- (v) Work on the Mekran Coastal road will be initiated;
- (vi) A National Programme would be formulated for training of skilled labour, middle managers and engineers engaged in modern road construction and managerial techniques;
- (vii) The responsibility of maintenance of Highways would lie with the owners. The provinces would however be asked to improve their maintenance capabilities based upon Pavement Maintenance Management Systems;
- (viii) The large kilometerage of canal roads in the country would be developed to proper design and properly maintained to cater for normal vehicular traffic;
- (ix) Local contractor capabilities would be developed to undertake modern mechanized highway contracts. Construction machinery would be maintained exclusively by the Private Sector, and all Public Sector machinery would be disinvested;
- (x) Tolls will be levied on new and rehabilitated highways which offer improved level of Service. These tolls would be collected by the owner of the facility/Service;
- (xi) Efforts would be made to improve emission controls, noise level, aesthetics etc of the road user vehicles through legislation and enforcement. Environmental impact study would be made mandatory for all road construction projects;
- (xii) Efforts would be made to check overloading of trucks which is one of the main reasons for early deterioration of roads. The existing legal limit is 9.6 tons which is routinely exceeded by as much as 40%; and
- (xiii) Efforts would be made to check encroachment on both intercity and urban roads.

11. The traffic projections of the PIAC for the Eighth Plan period are tabulated below:-

Traffic	Unit	Benchmark 1992-93	Projections 1997-98	ACGR %
Passenger				
Domestic	MPKS	2737	4006	7.9
International	MPKS	7739	9740	4.7
Total:-		10,476	13,746	5.11
Freight				
Domestic	MFTKS	41	53	5.3
International	MFTKS	449	522	3.1
Total:-		490	575	3.3

IV. AIR TRANSPORT

(a) Airlines

12. Pakistan International Airlines have projected an annual compound increase of 5.11 per cent and 3.3 per cent for passenger and freight traffic respectively. Capacity augmentation is projected to increase at 7.3 per cent and 2.8 per cent for passenger and freight respectively. Passenger traffic is expected to increase from 10,476 MRPKS during 1992-93 to 13,746 MRPKS in 1997-98 while freight traffic is expected to increase from 490 MFTKS in 1992-93 to 575 MFTKS in 1997-98.

13. The following policy and strategy is proposed during the Eighth Five Year Plan:-

- i) Continued emphasis on improved operational efficiency including cost control, reduction of manpower air craft ratio and higher rate of aircraft utilization in the PIAC;
- ii) The outlived fleet of Boeing 747 and Fokker F-27 aircraft would be phased out completely;
- iii) Remaining fleet of Boeing 707 will also be phased out completely;
- iv) Continued emphasis on improvement in liquidity position to generate funds for financing purchase of new aircraft;
- v) Aircraft will be procured on lease rather than out right purchase;
- vi) Induction of private sector in the Airlines would be accelerated;

(b) Civil Aviation Authority

14. Country wide traffic projections based at all airports during the plan period, are tabulated below:

	Benchmark 1992-93	Projections 1997-98	ACGR %
Passenger (Million)			
Domestic	7.52	10.54	7.0
International	3.78	482	5.0
Total	11.30	13.39	3.5
Freight (Million Tonnes)			
Domestic	0.08	0.10	4.56
International	0.16	0.20	4.56
Total	0.24	0.30	4.56

15. The following policy and strategy is proposed for the Eighth Plan:-

- i) Completion of the remaining work at Jinnah Terminal Complex at Karachi International airport;
- ii) Induction of private sector in CAA programme and Construction of new international airports at Islamabad, Lahore and Peshawar on Build Operate and Transfer (BOT) basis;
- iii) Improvement of runways at Islamabad and Karachi;
- iv) Upgradation of terminals, runways and other physical infrastructure at Peshawar for Boeing 747, Multan for Airbus A300 B4, Gwadar, Turbat, D.I. Khan, Gilgit and Skardu airports for Boeing 737 operations;
- v) Construction of Haj terminal at Quetta Airport;
- vi) Establishment of new airports at Rahim Yar Khan, Mansehra, Sehwan Sharif and Kharan; and
- vii) Procurement of crash fire and rescue vehicles.

V. TELECOMMUNICATIONS

(a) Pakistan Telecommunicataions Corporation (PTC)

16. On 30th June, 1993 total number of telephones installed stood at 2,000,000 giving a density of 20.6 telephones per 1000 population against a density of 6.7 as on 30th June, 1988.

17. Following traffic has been estimated for the Eighth Plan:

S.No.	Traffic	Unit	Bench Mark 1992-93	Projection 1997-98	AGPR %
i)	Trunk Traffic	Million Calls	388	747.06	14
ii)	Telex Traffic	Million Calls	49.45	29.2	(-10)
iii)	Inland Telegram	Messeage in Millions	1.44	0.677	(-14)
iv)	Overseas Telegram	-do-	0.13	0.025	(-28)

18. The following strategy would be adopted during the Eighth Plan period.

- i) To clear all subscriber pending demand by June 1998;
- ii) Improvement, upgradation and expansion of long distance and local network through installation of modern digital technology;
- iii) Improvement, upgradation and expansion of existing international gateway exchanges and provision of additional capacity to take up the increased traffic load;
- iv) Third International Gateway Exchange with a satellite earth station, the existing earth stations and long distance carrier system to be modernized;
- v) Establishment of a modern management information system, improvement of billing system and revenue collection;
- vi) Upgrading Carrier Telephone Industries (CTI) for the manufacture of peripheral terminal equipment and increased depth of local production in the PTC affiliated factories. Indigenous manufacture through joint ventures;

- vii) Staff Training in the areas of management, accounting, new technology and other appropriate areas. Co-ordination and co-operation with universities to strengthen research & development and to enable them to provide the appropriate skill base;
- viii) Improvement and upgradation of existing manufacturing units to increase depth and spread of production;
- ix) Improved Telecommunication facilities i.e. mobile service, Computerized Directory, Electronic Mail, Voice Mail, Teleconferencing, video conferencing, High speed data transfer, intelligent networks and Calling Identification(ID);
- x) Numbering scheme for Basic and enhanced fixed services mobile service and Integrated Services Digital Network (ISDN);
- xi) Improvement in the quality of service;
- xii) Opening up of Telecommunication to the private sector i.e. parallel system, operating companies etc;
- xiii) Encouragement of private sector in production of telecommunication equipment; and
- xiv) Privatisation of the PTC operations.

(b) Pakistan Postal Services Corporation (PPSC)

Postal Traffic

19. There were 750 million unregistered letters and 28 million registered letters during the year 1992-93 which are expected to increase to 800 million unregistered and 30 million registered letters by the end of 1997-98.

20. The following policy and strategy has been proposed for the Eighth Plan.

- i) Permission for utilisation of Postal Life Insurance (PLI) Fund in the profit generating ventures should be given by the Government;
- ii) Improvement in the penetration of the Post Offices from one post office for a population of 8000 by 1993 to one post office to serve a population of 6000 by 1998; and
- iii) Induction of private sector to be encouraged.

MANAGEMENT ISSUES

21. The principal problem anticipated in implementation of the plan and to achieve the targetted objectives would be the inadequate capability of the executing organizations to plan and implement the projects. This would result in cost over-runs which would consequently affect the

priorities and the phasing of a number of projects of operational nature. Such cases in point, experienced in the past, are Aeronautical Communications and Control System project of the Civil Aviation Authority, Locomotive factory of Pakistan Railway and dualization of National Highway N-5 by the National Highway Authority. These alongwith other projects lagged much behind the schedule as a result of which the benefits expected to accrue from such projects could not be realized in time. It is therefore proposed that properly qualified professionals be appointed as head of the executing organizations and managerial capabilities of all the executing agencies may also be enhanced by imparting relative training so that proper implementation could be ensured and plan objectives achieved.

REHABILITATION & MAINTENANCE

22. The Eighth Plan policy focuses on an integrated system approach to design a comprehensive Transportation system adequate enough to cater for the development needs of the country. A major bottleneck in design of such a system is the lack of maintenance funds earmarked for the existing infrastructure. The neglected and deferred maintenance in the past had necessitated capital reinvestment in the current plan. The Eighth Plan programme therefore aims at rehabilitation of the existing network and a modest expansion in the system capacity. The Highway development programme include World Bank financed on-going projects viz. Maintenance Backlog Reduction and Resurfacing/Strengthening programme. Improvement of a number of National Highways in all the four provinces has been identified and adequate financial cover earmarked to ensure its implementation. In Railways an on-going programme of track rehabilitation programme would be completed besides start of a new programme in later part of the plan period. Rehabilitation of 101 overage DE Locos is also envisaged. In Civil Aviation improvement and strengthening of runways at Islamabad, Karachi, Peshawar, Multan, Gwadar, Turbat, D.I.Khan, Gilgit and Skardu is envisaged.

EIGHTH PLAN PROGRAMME

23. It is aimed to bring out the best characteristics of each mode of transport by undertaking necessary improvements in them and ensure optimal utilization of the existing system capacity through better management and operational techniques. But to develop a transportation system large and sophisticated enough to cater satisfactorily to the traffic needs of the Eighth Plan would require a level of investment which would place heavy burden on the public exchequer. A major thrust would, therefore, be the continuation of efforts for the induction of the private sector financing for the commercially viable projects of roads, road transport, air transportation, Ports, Shipping and the Telecommunications. To meet the above objectives an allocation of Rs 130.576 billion has been made for the Federal Programme during the Eighth Five Year Plan. This includes Rs 45.783 billion in the Public Sector, Rs 74.687 billion for the budgetary corporations and Rs 10.106 billion for the non-budgetary self financing corporations. Besides Rs 18.3 billion has been allocated outside the budget for Pakistan Telecommunications Corporation (PTC) during first year of the plan period pending a decision by the Government for privatization of the PTC. Details may be seen at Statistical Appendix Table-III-7.1. Major physical targets are at Statistical Appendix Table-III-7.2 Telecommunication targets are given at Statistical Appendix Table-III-7.3. Sub-sector wise details are discussed in the subsequent paras.

I. PAKISTAN RAILWAYS

24. An allocation of Rs 40,041 million has been proposed for Pakistan Railways. Salient features of the Eighth Plan development programme are given below:-

- i) **Motive Power:** An allocation of Rs 8390 million has been made for rehabilitation of 101 D.E. Locomotives and manufacture of 51 D.E. Locomotives at the Risalpur Factory during the Eighth Plan. Fitment of air brakes on locomotives would also be provided during the Plan period.
- ii) **Rolling Stock:** An allocation of Rs 2268 million has been made for manufacture of 175 A.C. coaches, refurbishment of 160 passenger coaches having life of over 20 years by replacing old battery sets and electrical control system and manufacture of 200 BOT's during the Eighth Plan period. Fitment of air brakes in the coaches would also be provided with an investment of Rs 40 million during the Plan period.
- iii) **Track Rehabilitation** In order to improve the quality of Service and reliability of Railways operation, the Eighth Plan envisages an allocation of Rs 11,787 million for Track Rehabilitation programme. This includes Rs 8,000 million for improvement of track on main line from Karachi to Peshawar to cater for high speeds, Rs 2800 million for Spezand-Taftan Section and Rs 987 million for completion of on-going track improvement/rehabilitation programme during the plan period.
- iv) **Doubling of Track** An allocation of Rs 10,000 million has been made doubling of 800 Kms of Track from Lodhran to Peshawar to remove the speed restrictions on the main line.
- v) **High Capacity Wagons:** An allocation of Rs 2612 million has been made for manufacture of 1,367 high capacity wagons and augmentation of wagon manufacture facilities during the plan period.
- vi) **Telecommunications and Signalling:** An allocation of Rs 302 million has been made for extension of Telecommunication facilities through microwave, UHF, VHF network from Kundian to Peshawar, Lodhran to Lahore and Raiwind to Khanewal. Besides an allocation of Rs 483 million has been made for completion of on-going programme of providing track circuiting on 94 stations during the Eighth Plan period.
- vii) **Fitment of Roller Bearing To Freight Wagons:** An allocation of Rs 300 million has been made for completion of an on-going programme for replacement of plain bearings fitted in 14,278 freight wagons with roller bearings.

- viii) **Stores Inventory:** An allocation of Rs 730 million has been made for completion of balance procurement of spares for unit exchange and stores inventory.
- ix) **Traction Motors:** An allocation of Rs 483 million has been made to complete the on-going work on rehabilitation of 660 and procurement of 270 new traction motors during the plan period.
- x) **Recommissioning of 46 DE Locos:** An allocation of Rs 190 million has been made for completion of the on-going project for recommissioning of 46 DE Locos during the Eighth Plan.
- xi) **Maintenance Equipment:** An allocation of Rs 288 million has been made for augmentation of workshops and maintenance equipment during the Eighth Plan period.
- xii) **Locomotive Factory:** An allocation of Rs 350 million has been made for completion of the remaining works on establishment of Locomotive Factory at Risalpur.
- xiii) **Wagon Movers:** An allocation of Rs 480 million has been made for purchase of 50 wagon movers to replace the outlived D.E Locos of smaller H.P. deployed in yards as shunting locomotives.
- xiv) **Revamping of Electric Locos:** An allocation of Rs 500 million has been made for revamping of 29 Electric Locomotives during the Eighth Five Year Plan.
- xv) **Management Information system:** An allocation of Rs 429 million has been made for the establishment of Management Information System and Institutional Development studies etc for Pakistan Railways.
- xvi) **Other Works:** An allocation of Rs 449 million has been made for other works of Railways including Electrical Works, Wagah Railway Station, renovation of stations line capacity works and strengthening/rehabilitation of old bridges etc during the Eighth Plan period.

Performance Indicators

25. The productivity and performance indicators of the Railways system which were targeted to but could not be achieved during the Seventh Plan are targeted to improve during the Eighth Plan. These indicators will have to be monitored from time to time and appropriate measures taken in case the performance is not upto mark during any period of review:

- i) wagon turn around time to be reduced from 18 days to 7 days;
- ii) daily Engine-Kilometer-age per engine in use (goods) to be increased from 216 Kms per day to 300 Kms per day;
- iii) percentage ineffective locomotives to be decreased from 23 per cent to 15 per cent; and
- iv) daily system loading to be increased from 1178 to 2300 wagons per day.

II. PORTS & SHIPPING

(a) Ports

26. The Eighth Plan envisages an allocation of Rs 4756 million of which Rs 3256.0 million will be funded from the Public Sector and Rs 1500 million from the non-budgetary corporate sector. In addition a large size development programme will be undertaken in the ports and shipping sub-sectors under the Private Sector.

27. Major projects of the Port Development Programme under the Public/Corporate Sector include construction of Jinnah Bridge (Phase-II), acquisition of a bucket dredger and computerization at Karachi Port, deepening of navigational channel for 75,000 DWT ships and construction of additional iron ore and coal berth for Pak steel at Port Qasim.

28. Under the Private Sector construction of Fully Integrated Container Terminal, reconstruction of Berths No.5 to 8 at the East Wharf, acquisition of VSP tugs and pilot boats and development of modern warehousing complex at Karachi port and acquisition of trailing suction hopper dredger & construction of container, grain and fertilizer terminals and development of maritime Industrial area at Port Qasim and construction of a deep water port at Gwadur to cater for ships of upto 100,000 DWT are envisaged.

(b) Shipping

29. The programme for development of shipping will be taken up entirely under the private sector.

30. The programme of the Pakistan National Shipping Corporation provides for acquisition of 7 new gearless second generation container ships of 1200/1800 TEU capacity, two bulk carriers of 60-70000 DWT, one edible tanker of 25-30000 DWT and 10000 TEU steel containers. Four new gearless second generation container vessels of about 1200 TEU capacity and 4 new gearless third generation container vessels of about 1800 TEU capacity will be acquired. If the shipping programme is implemented total fleet will be able to carry 40 per cent of the liner traffic. The National Tanker Company will acquire one product tanker and one crude oil tanker of 70-90,000 DWT. The private sector is also expected to acquire 2 bulk carriers.

31. Break up of the investment programme is as follows:-

Sr.No	Sector/Project.	Allocation (Rs Million)
Public Sector		
(i)	Port Qasim Authority.(PQA)	324
	-Phase-I.	765
	-Deepening of Navigation Channel for 75000 DWT ships.	10
	-Computerization .	602
	-Construction of additional IOCB berth for Pak Steel.	195
	-Temporary Oil Terminal No.2 at Port Qasim	390
	-Bulk Water Supply to Port Qasim Industrial Area	-----
	Sub-Total. (PQA)	2286
(ii)	Pakistan Marine Academy. (PMA)	
	-Upgradation of Laboratories.	20
	-Establishment of Marine College:	218
	(i) Phase-I. (Equipments)	331
	(ii) Phase-II. (Training Vessel)	-----
	Sub-Total. (PMA)	569
(iii)	Directorate General. (Ports & Shipping)	376
	-Jinnah Bridge Phase-II	25
	-Other Projects.	-----
	Sub-Total. (iii)	401
	Total: (i + ii + iii)	3256
Public Sector Corporation (non-budgetary)		
	Karachi Port Trust.	552
	-Bucket Dredger & Ancillary Craft.	420
	-Jinnah Bridge Phase-II.	15
	-Computerization.	513
	-Other projects.	-----
	Sub-Total.	1500
	Total (Ports)	4756

III. NATIONAL HIGHWAYS

32. The Eighth Plan envisages an allocation of Rs 74,687 million for the Road Development Programme under which 335 km of new roads will be constructed and 4659 km of the existing roads upgraded, rehabilitated, dualized and improved.

33. Major elements of the programme are as follows:-

National Highways

(Rs Million)

(a) Programme for Improvement and Widening for increasing the capacity of existing system.	14851
(b) Maintenance Backlog Reduction Programme.	1641
(c) Resurfacing and Strengthening Programme.	773
(d) Improvement of Indus Highway N-55.	15745
(e) Fourth Highway Project.	1904
(f) Dualization of National Highway (N-5).	20054
(g) Lahore Bypass	2870
(h) Lahore-Islamabad Motorway.	9460
(i) Kohat Tunnel.	1800
(j) Coastal Road	2000
(k) Lowari Tunnel	2000
(l) Other Projects	1589

Total:	74,687
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34. Among major projects Rs 1904 million are envisaged for the Fourth highway project which includes dualization/improvement of remaining sections of National Highway N-5 including overlay on the Gujranwala-Rawalpindi section and dualization of Gujranwala-Chenab bridge Section.

35. Rs 15,745 million are envisaged for improvement and upgrading of the National Highway N-55 (Indus Highway), Rs 1641 million for the Maintenance Backlog Reduction and Rs 773 million for the Resurfacing and Strengthening Programmes.

36. An allocation of Rs 14,851 million is envisaged for improvement and widening of the National Highways for enhancement of their capacity. These include improvement of National Highway N-25 (Uthal-Bela, Kararo-Wadh, Wadh-Saryab, Saryab-Kalat and Kalat-Chaman Sections), improvement of National Highway N-35 (Mansehra-Khunjerab), improvement of National Highway N-40 (Mastung-Noshki-Dalbandin, Dalbandin-Nokundi and Nokundi-Taftan), Improvement of National Highway N-50 (Dhanesar-Mughal Kot and Mughal Kot-D.I. Khan Sections) and improvement of National Highway N-70 (Qilla Saifullah-D.G.Khan).

37. An allocation of Rs 20,054 million is envisaged for dualization of National Highway N-5 (Hala-Rahim Yar Khan, Bahawalpur-Mian Channu, Okara-Lahore, Kharian-Rawalpindi and Chablat-Nowshera Sections).
38. An allocation of Rs 9460 million is envisaged for the Lahore-Islamabad Motorway project.
39. Among projects for bypasses an allocation of Rs 2870 million is envisaged for the Lahore Bypass including bridge over River Ravi.
40. An allocation of Rs 1800 million is envisaged for the Kohat Tunnel, which will form a part of the Indus Highway. To connect Chitral with rest of the country a Tunnel at Lowari top is envisaged. Work on construction of the Tunnel will be initiated with an allocation Rs 2000 million during the Eighth Plan period.
41. An allocation of Rs 2,000 million is envisaged for construction of a coastal road from Liari (Karachi) to Jiwani near the Pak-Iran border. This road which will connect the twons on the Mekran coast has a total length of 700 Km and is estimated to cost Rs 10,500 million.

IV. AIR TRANSPORT

(a) Airlines

42. To meet the Plan objectives and the anticipated traffic it is proposed to induct capacity equivalent of two Airbus A310-300, three Boeing 737-300, Seven new widebody aircraft as replacement of Boeing 747-200 and 15 New Turbo Prop aircraft as replacement of outlived Fokker F-27 fleet with the induction of the above fleet the capacity projections during plan period would be as follows:-

Eighth Plan Capacity Projections of the Airlines

					(Million)
	Benchmark 1992-93			Projections	ACGR %
	PIA	Private	Total	1987-88	
Passenger	14,195	1,698	15,893	20,258	5.0
ASKS					
Freight	838	-	838	960	2.8
AFTKS					

43. The fleet induction programme of the PIAC would depend upon acceleration of private sector in the airlines. It would therefore be necessary to monitor the private sector acquisition on yearly basis and review/adjust the PIAC programme accordingly. PIAC would however, be encouraged to induct the aircraft on lease rather than outright purchase. An allocation of

Rs 1,300 million has been made for PIAC to cater for the essential fleet procurement programme and development of equipment and other facilities which would be met through self financing of the airline. The capacity shortfall would be augmented through the induction of private sector in airlines. The PIAC would be encouraged to induct the aircraft on lease rather than outright purchase.

44. The Civil Aviation Authority, however could not initiate strengthening of runways at Islamabad, Karachi, Sukkur etc. Upgradation of airports at Peshawar, Gilgit, Kohat, Bannu, D.I.Khan. Saidu Sharif Chitral and establishment of feeder Services airport at Mansehra, Loralai and Kotli mainly due to scarcity of resources as a result of diversion of funds to new Karachi Air Terminal the expenditure on which had gone beyond what was anticipated.

(b) Civil Aviation Authority

45. According to the Eighth Plan strategy and policy the principal components of the Eighth Plan programme are given below:

	Rs Million
a) Jinnah Terminal Complex.	514
b) Upgradation/improvement of runways and Terminals at Peshawar, Multan, Gwadar, Turbat, Chitral, D.I. Khan, Gilgit and Skardu airports.	1094
c) Reconstruction of Secondary runway at Karachi.	300
d) Strengthening/extension of main runway and allied facilities at Islamabad.	152
e) Basic aerodrome facilities at Rahim Yar Khan, Mansehra, Sehwan Sharif and Kharan.	1330
f) Improvement of Terminal facilities at Mirpur Khas and Sukkur	100
g) Haj Terminal at Quetta	30
h) Security fencing at all airports	400
i) Completion of on-going works at all airports	212
j) Procurement of Crash fire and Rescue vehicles.	274

Total:	4,406

46. The total capital outlay of Rs 4,406 million for the above programme will be financed from the CAA own revenue surplus, borrowing and foreign loans.

(c) Airport Security Force

47. An allocation of Rs 607 million has been made during the Eighth Five Year Plan for the construction of barracks accommodation for the ASF guards and procurement of security and detection devices. The control towers and watch rooms at airports would be provided by the Civil Aviation Authority. Major components of the ASF programme proposed for implementation during the eighth plan period would be as follows:-

	Cost (Rs Million)
a) Electronic equipment.	334
b) Living and Admn. Accommodation (All airports)	200
c) Technical Accommodation (All airports)	73

Total:	607

(d) Pakistan Meteorological Department

48. An allocation of Rs 485 million has been made for modernization and upgradation of meteorological facilities for Civil Aviation during the Eighth Plan period.

V. NTRC AND HIGHWAY SAFETY

49. An allocation of Rs 200 million is envisaged for the continuation of Transport Research Studies and the Highway Safety programme in the country during the Plan period.

VI. NATIONAL INSTITUTE OF TRANSPORT

50. An allocation of Rs 50 million has been made for completion of National Institute of Transport during the Eight Plan period.

VII. TELECOMMUNICATIONS

(a) Pakistan Telecommunication Corporation

51. The Eighth Plan envisages a large increase in the number of various facilities such as telephone, PCO's, Telex lines and STD/NWD channels. Salient features of the programme are given below:

- i) The overall present telephone penetration as at June, 1993 is about 20.6 per thousand of population. PTC have planned to install 500,000 telephones per annum during the Eighth Plan period which would increase this ratio to 35.6 per 1000 of population;
- ii) Pakistan's large cities (Lahore, Karachi, Islamabad) are the business and commercial centers of the country. Therefore, telephone penetration in these and other commercial centers should be significantly enhanced as compared to the overall national average. A target of 150 telephones per 1000 of population has been proposed for the three cities;
- iii) The Eighth Plan envisages due share of new telecommunication developments e.g. nationwide long distance calls, digital telephone exchanges etc. to small urban cities;
- iv) Rural communities with a population of say 500 would become the recipients of at least one long distance Public call Office (PCO);
- v) The present long distance network is fragmented and does not have full coverage of the country. The Eighth Five Year Plan envisages a digital transmission network covering all the country and a network management system which integrates all the existing and new transmission routes;
- vi) Whilst the long distance network will have two fiber cables routes, it is proposed to provide fiber penetration to metropolitan areas. The key cities of Pakistan (Islamabad, Lahore, Karachi) are to have fiber rings in their central business districts;
- vii) The following new services are planned during the Eighth Plan period:
 - Narrow band ISDN
 - Tele conferencing
 - High Speed data transfer
 - 0800/0900 service
 - Computerized national and international directories
- viii) The network will be managed by computerized network management centers capable of automatically restoring traffic under fault conditions;

- ix) The existing local loop of the PTC's network is very old. There are significant complaints of cross-talk and inferior quality. The sources of degradation to voice frequencies affect fax services even more adversely - eventually causing call drop-outs. To overcome the problem PTC proposed rehabilitation and upgradation of the local loop and other parts of the network;
- x) The following mobile services are proposed for with the assistance of the private sector:
 - Expansion and upgradation of existing cellular networks
 - Nationwide paging
 - Cordless Telepoint
- xi) PTC will be re-organized to provide for marketing and customer services and human resources related organizations in the head offices and regional centers. Training facilities to existing staff will be provided in areas of management, new technology and other areas as appropriate. New staff will be recruited to meet the increased work load due to new capacity and new services. To achieve a staff/telephone lines ratio of 29/1000 some 80,000 new staff covering various skills will be recruited. This will require a very close and effective co-ordination with the national universities so that students are appropriately trained and equipped with the new skills needed. More efficient and better accounting procedures will be put in place and specialized staff in area of accounts practices will be recruited.

Investment Requirement

52. To achieve the above targets the Eighth Plan envisages a total investment of Rs 110.0 billion. This includes a throwforward of Rs 28.30 billion from the Seventh Plan.

53. The capital requirement of the Eighth Five Year Plan Programme is Rs 110,000 million (local Rs 45,000 million, foreign exchange component Rs 65,000 million). Privatization of PTC remained under active consideration of the Government. Pending a decision on privatization an allocation of Rs 18,300 million only has been made for PTC under the corporate sector programme during the first year of the Eight Plan period. The PTC is expected to be privatised and balance of the investment would therefore come from the Private Sector.

(b) Special Communication Organisation

54. Major objectives for the development of telecommunication facilities in Azad Jammu & Kashmir and Northern Areas during the Eighth Five Year Plan are given below:

- a) Clearance of Pending Telephone Demand;
- b) Conversion of Central Battery Exchanges to Electronic/EMD Exchanges up to tehsil level;
- c) Extension of Nation Wide Dialing facilities up to tehsil level;

- d) Microwave systems between major towns to enhance the existing channel capacity for the extension of NWD,ISD,FAX, Telex and Data facilities;
- e) UHF links to connect tehsil headquarters with district headquarters;
- f) Expansion of DOMSAT channels from 24 to 120 at Gilgit and from 24 to 72 channels at Skardu;
- g) Replacement of worn out equipment by more sophisticated and cost effective equipment;
- h) Provision of Long Distance communication facilities with NWD/ISD Facilities to the remote areas; and
- i) UG cable network up to tehsil headquarters level.

55. An allocation of Rs 1144 million has been made for Special Communications Organization to cater to the telecommunication needs of AJ&K and Northern Areas during the Eighth Five Year Plan.

(c) Pakistan Postal Services Corporation (PPSC) Postal Traffic

56. The total number of post offices in the country by the end June, 1993 would be 13513 out of which 1887 would be in the urban areas, indicating a ratio of one post office to an area of 60 sq.km and for a population of 8000 persons.

57. According to the Universal Postal Union (UPU) one post office on an average should serve an area of 20 to 40 sq.km and population of 3000 to 6000. In order to improve the situation. It is, therefore, proposed to open 5000 new post offices during the Eight Plan period of which 4000 would be opened in the rural areas and 1000 in the urban areas.

58. During the Eighth Plan period the major targets would be:

- i) opening of 5000 new post offices; 4000 in rural areas and 1000 in urban areas;
- ii) construction of 350 post office buildings and 500 residential quarters;
- iii) construction of a mechanized sorting office at Karachi & Lahore;
- iv) purchase of machines for letter sorting, stamp cancelling, bag clearing;
- v) computerization of post office account, financial services, PLI and saving banks; and
- vi) purchase of machines for registration, money order, stamp vending, automatic franking.

59. An allocation of Rs 2900 million has been made during the Eighth Plan period under the non budgetary corporate programme for the implementation of the above programme.

60. Post Office Department is a no profit no loss service. It has been facing loss. The Postal Life Insurance Fund amounting to Rs 1200.0 million has been lying dormant. It is proposed to utilize this fund for investment in profit generating assets like commercial buildings etc. which would generate additional income and provide a source of self financing for the Postal Services.

III-8

PHYSICAL PLANNING AND HOUSING

Objectives and Strategy

Physical Planning and Housing Sector (PP&H) focuses on facilitating the land acquisition, shelter development, provision of drinking water, improving sanitation in urban and rural areas, and regulating the urban growth. It aims at reducing the shortage of shelter meeting the basic needs of drinking water supply and sanitation with emphasis on serving the poorer sections of the population. A major sectoral objective is to minimize the disparities between rural and urban areas with regard to the levels of service-infrastructure facilities.

2. Major policy initiatives during Eighth Plan will be as under:

- i) The Government role shall be confined to that of a facilitator in the development of housing. The development authorities, local bodies, developers etc. will mobilize resources to develop sites and services for provision of residential plots, and the construction of houses thereon would be the responsibility of the plot owners.
- ii) In order to enable the construction of houses, the Government will facilitate provision of institutional credits through the establishment of Housing Finance Institutions as well as streamline the role of HBFC to operate on commercial basis for the middle and higher income groups.
- iii) In large cities, the provision of trunk infrastructure for water supply, sanitation and drainage will be made through assisting their development agencies in expeditious arranging both local and foreign fundings to undertake relevant urban development projects in an integrated manner; and subsequent cost recovery from the beneficiaries, after the completion of such systems. In the intermediate and smaller towns/cities, the Public Health Engineering Departments will be strengthened and provided additional allocations to implement/augment water supply and sanitation projects. The Eighth Plan envisages increase in the urban water supply coverage upto 95% population by 1998. For effective operation and maintenance of completed urban water supply and sewerage systems, the Provincial Governments/CDA shall enforce incremental user-tariffs to meet the entire O&M expenditures.

- iv) The Government has accorded high priority to improvement in the living conditions of rural masses. Social Action Programme, inter-alia includes the provision of safe drinking water and sanitation facilities to 70% of rural population by 1998. For the proper O&M of completed systems, the village communities will be organized and trained by the Public Health Engineering and the Local Government Departments, in order to maintain and operate the systems on sustainable basis through self generation of necessary resources and with minimum possible subsidy from the public sector.
- v) A National Urbanization Policy followed by the Provincial Urbanization Policies and a Framework for Regional Development of New Towns in Pakistan, shall be formulated. Implementation of the policy will begin during the Plan.
- vi) The urban population will grow from 33 percent in 1993 to 35 percent in 1998 i.e. 46 million. The brunt of this increase is likely to be borne by major cities such as Karachi, Lahore, Faisalabad, Multan, Gujranwala, Peshawar, Quetta, Rawalpindi and Hyderabad. Economic and social policies will therefore be so designed that the directions of urbanization are shifted towards secondary and intermediate urban centers. Development strategies and programmes of relevant sectors, specially transport and communications, electricity and provision of gas, industries and provision of environmental and education services, will be so formulated that investment opportunities and availability of social services attract entrepreneurs in the secondary and intermediate cities/towns. This will create employment opportunities and will minimize migration of rural population to bigger cities.

Consolidation

- i) In view of the overall resource constraints, the Provincial Urban Development Strategies should firstly concentrate on making more effective use of existing regional infrastructure i.e. by concentrating investment in growth-belts as well as their surrounding cities.

- ii) The on-going Programmes of Katchi Abadis Regularization and Development ; Urban Renewal and Slum Improvement ; Shelter for the Shelterless; 7-Marla Plots Scheme in rural area and 3-Marla Plots Scheme for urban areas ; Industrial Workers Housing ; Development of Federal Capital, Islamabad; and Government Servants Housing shall be geared up with the provision of additional financial resources and efficient implementation.
- iii) Large scale Base-maps of all urban-centers in Pakistan shall be prepared with arrangements for their regular updating and distribution among development authorities, municipal corporations and utility providers.
- iv) Regional Development Plans shall be prepared as instruments to strengthen the horizontal and vertical linkages among urbanization policies and rural development activities. Regional development goals include reducing income disparities between the rural and urban areas; and improve the transport, marketing, communications and administrative-linkages between metropolitan centers, secondary cities and small market towns.

Eighth Plan Programmes

3. In view of the resource constraints, it is not possible to remove the housing backlog (estimated at 6.25 million units in 1993). Only the incremental demand of residential plots and houses during 8th Plan Period will be catered for. Similar is the position regarding maintaining the existing system and developing new water supply and sanitation projects. The 8th Plan's Sectoral Approach therefore stresses on greater involvement of the community as well as efficient cost recoveries based on incremental user-rates.

Housing

4. The Government's role would be that of a facilitator in arranging the land for development of housing sites and services by the public and private sectors, and to expand availability of institutional credit for construction of houses. National Housing Policy indicates a backlog of about 6.25 million units based on FBS Housing Survey of 1989. As it is not possible to remove this backlog in near future, the 8th Plan strategy would control further

deterioration of the shelter situation by catering fully to the incremental needs of housing. Regarding backlog, efforts would be made to tackle this problem over a longer period.

5. Following specific programmes shall be adopted during the 8th Plan to increase the housing provision:

- i) Land acquisition programmes of Housing Development Agencies would be on continuous basis and not piecemeal i.e. scheme by scheme. A comprehensive land information and registration system would be developed with the support of modern technology e.g. computerization, aerial mosaics, etc. Land Acquisition Laws would be reviewed, enabling local authorities to procure land on market prices without the litigations.
- ii) To curb speculative trends, the owners of vacant plots would be subjected to heavy penalties for ensuring timely construction of houses. The plots shall be cancelled in case of inordinate delay.
- iii) To improve affordability level of low-income groups, the mechanisms of cross-subsidy, longer repayments period, cooperative housing system, and incremental development of infrastructure would be adopted.
- iv) Government would encourage Housing Finance Companies in a market-oriented framework. HBFC is proposed to be converted into a market oriented institution, for mobilizing funds from the market, beside financing the low-income groups housing programmes.

Urban Housing

6. In urban areas, over 70% of the annual incremental demand is of low income groups, who find it extremely difficult to secure developed plots & construct houses. To address this need, following policies would be adopted:

- i) Housing schemes shall be developed on the concept of developing infrastructure and services on incremental basis, with the involvement of community.

- ii) To make such schemes sustainably viable, the cost of land and development charges be recovered from the beneficiaries in easy installments over longer period of time.
- iii) HBFC should provide long term house construction loans to the low-income allottees of 3-Marla plots and the residents of Katchi Abadis for improving their houses.

Rural Housing

7. Access to land for the rural poor is beyond his financial and social means. Existing rural housing stock is rapidly deteriorating and posing serious quality problems. The 7-Marla Plots are allotted to the rural shelterless free of cost, and no infrastructure and basic services are provided therein. Hitherto, 7-Marla Schemes have not been designed on proper planning. A smaller number of 7-Marla Plots (i.e. 0.50 million) have been proposed for allotment during the 8th Plan on the evidence that against the total number of 2.9 million plots allotted during the 7th Plan, the number of houses constructed thereon were negligible. Therefore, the Provincial Governments shall arrange for the construction of houses on already allotted 7-Marla plots. During 8th Plan, the 7-Marla plots schemes would be streamlined/made effective as under:

- i) These schemes would be located and implemented on land in vicinity of existing villages.
- ii) Nominal services on incremental basis would be provided so that the cost remains within the affordability of rural poor.
- iii) A Revolving-Fund with seed capital, provided on matching basis by the Federal and Provincial Governments, will be created to meet the cost of land and minimum services.
- iv) Costs of land and services would be recovered from the beneficiaries in easy installments, without interest during the repayment period.
- v) Long term loan through HBFC would be provided to the allottees of 7-Marla Plots for house construction.

Katchi Abadis Development

8. To upgrade Katchi Abadis and to check their future growth in urban areas, the policies to be pursued by Provincial Governments during 8th Plan period are as follows:

- i) Katchi Abadis/Slums improvement programmes would be limited to provision of essential services like water supply, sanitation and paved streets. Electricity, education and community facilities will be provided out of respective Sectoral resources. The beneficiaries would themselves manage and maintain such works at Mohalla levels.
- ii) Realistic criteria for regularization of Katchi Abadis built to-date, and based on the residents authenticity, would be evolved and practiced.
- iii) After announcing clear cut-off date and effecting sound legal/administrative enforcement, a strict control should be exercised in all urban areas against land encroachment to stop formation of new Katchi Abadis.
- iv) Nation-wide urban renewal programmes would be launched with the participation of private sector.

Industrial Workers Housing

9. To cater for the housing requirement of industrial workers, the Government in 1971 established a Workers' Welfare Fund with regular source of income through contribution from the employers. Out of the Fund, so far 7211 houses/flats have been constructed and 39,502 plots developed, meeting about 10 percent of the demand. Under this programme, houses/plots are given to the workers on no-profit no-loss basis. The Eighth Plan's envisages provision of additional 20,000 plots for construction of an equal number of houses for industrial workers in planned colonies near their working places. Rs.2 billion would be provided through Industrial Workers Fund for development of plots.

Government Servants Housing

10. Overall existing strength of Federal Government Employees including all Ministries/Divisions, their attached and subordinate Departments is 2,70,000 stationed in Islamabad, Karachi, Lahore, Rawalpindi, Quetta, Peshawar and other smaller stations. Total entitled housing demand of Federal Government employees from the Estate Office's pool is

79,514 units. Against this, the Government has provided accommodation to 46 percent employees through Government owned and hired houses. Rest of the employees are given house-rent allowance @ 45 percent of their initial substantive salary. During 8th Plan, additional 10000 houses for Government Servants will be developed, thus meeting 60 percent of the total demand. About 10,000 units more will be constructed by the Provincial Governments for their employees. It is expected that through the Ownership Schemes, additional 5,000 units would become available. During 8th Plan, beside construction of Government owned houses, the following actions will be taken to increase housing supply to Government employees:

- i) Housing Scheme on Ownership Basis for Federal Government employees already introduced in Islamabad, would be extended in other cities like Karachi, Lahore, Quetta and Peshawar. Similar schemes would be taken up by the Provincial Governments for their employees.
- ii) Government Servants Housing Cooperatives would be encouraged to organize the floating of new schemes. Government will provide necessary facilities in land-acquisition and the loaning for house construction.
- iii) To eliminate discrimination, the house rent allowance equal to entitlement for hiring, should be provided to those who have not been provided the Government accommodation.
- iv) Family-type accommodation should not be provided to bachelors and hostel-type accommodation for employees of different categories would be constructed in Islamabad, Karachi and Lahore.
- v) Prevailing covered area standards and specifications of various categories of Government Houses, specially of Categories-I, II and III would be reviewed to reduce the cost and benefitting more employees.

Water Supply and Sanitation

11. Unsafe drinking water and improper disposal of waste-water are major causes for ill-health of the people. Access to potable water supply and sanitation facilities not only leads to a healthy living but also has direct economic and environmental benefits. High priority has been assigned by the Government for provision of these facilities to the maximum population. The Social Action Programme aiming to provide social services, is being implemented vigorously

including provision of drinking water supply and sanitation facilities in rural areas. Presently in Pakistan, 61.5 percent of the total country's population has access to safe water, whereas proper sanitation facilities are available to 30 percent population.

Rural Water Supply and Sanitation

12. Social Action Programme (SAP) aims to integrate the needs of Primary Education and Health, Population Welfare, and Rural Water Supply and Sanitation, to enhance the overall socio-physical targets to be achieved under 8th Plan. In case of Water Supply and Sanitation, the SAP concentrates on the grossly neglected rural areas. Overall national rural water supply coverage in 1992-93 including FATA, Northern Areas and AJ&K works out to 47 percent while in case of sanitation 13.5 percent. It is proposed to provide water supply to an additional population of 27 million to raise overall coverage upto 70.5 percent by 1997-98. In case of sanitation, it is proposed to cover an additional 19 million population to raise its coverage to 31.5 per cent by 1997-98. Entire financing of Rural Water Supply and Sanitation Programme during 8th Plan (i.e. Rs.31.433 billion) would be through the SAP; including Provincial allocations of Rs.29.10 billion. For effective implementation of SAP; both the PHEDs and LG&RDDs will be strengthened alongwith ensuring the meaningful involvement of local committees in identification, planning, execution and most significantly in operation and maintenance of completed systems. Best available platform for community participation and recovery of user-charges are local bodies. Their effective and greater involvement in the planning, development and O&M of rural water supply and sanitation schemes, would be ensured. With a view to encouraging more private sector investment and involvement in social sectors, the existing regulatory framework will be reviewed to make changes consistent with the Government's Policy of economy-liberalization.

Urban Water Supply and Sanitation

13. Presently in urban areas, the overall coverage of water supply and sewerage facilities is 85 and 60 percent, respectively. By the end of 8th Plan, the water supply facilities shall be available to 95% and sewerage facilities to 80 percent of total urban population; by covering additional population of 11.884 million with water supply and 14.382 million with the sewerage. Urban water supply & sanitation targets would be achieved through the completion of ongoing projects as well as rehabilitation of existing water supply systems together with improvement in the distribution systems. Efforts will be made to reduce losses in the system so that maximum availability of water is ensured for supply to consumers. To enable the implementing agencies to achieve the 8th Plan's targets as well as to maintain and operate the existing systems on

sustainable basis, allocation of Rs. 19.255 billion has been made in 8th Plan, beside obtaining the foreign loans on concessional interest.

PP&H Schemes in Islamabad

14. Construction of Islamabad Capital City was started in 1960. According to the Master Plan, 67 sectors are to be developed for various uses i.e. Administrative, Public Buildings, Diplomatic Enclave, Capital Park, Central Business District, Green Areas, Institutional, Industrial, Whole-sale Markets and Residential. Till-date, out of the 44 residential Sectors, Only 16 have been developed accommodating 60,483 houses (32,767 private and 27,716 public). Three more residential Sectors (D-12, E-12 and I-14) stand planned for development. Slow development of residential units, has widened the demand-supply gap considerably resulting in tremendous increase in the prices of plots at Islamabad. The pace of residential Sectors development will be stepped-up. To relieve the pressure, at-least another 4 Sectors need to be developed during the 8th Plan, where land has already been acquired by Capital Development Authority.

15. Present Islamabad's urban population is about 3.5 lacs, putting pressure on supply of drinking water and sewerage facilities, and availability of water is not sufficient to meet the existing and future needs. Two schemes pertaining to Conduction of Water from Simly Dam and Khanpur Dam will be undertaken during the 8th Plan. As the CDA is also responsible for constructing the Government buildings in the Capital, during 8th Plan the (i) Supreme Court Building, (ii) Parliament Lodges, (iii) Prime Minister's Secretariat, (iv) CBR House, and (v) Houses for Supreme Court Judges shall be completed. Except for the buildings of national importance, the 8th Plan would limit the construction of new office-buildings in Islamabad, where private buildings are not available for hiring. An allocation of Rs.300 million is made to complete the on-going projects including Office Buildings for FPSC; Federal Shariat Court, Election Commission, Council of Islamic Ideology, National Police Academy, National Savings Organization, Customs and Central Excise.

16. All development activities of CDA except for Sectors/plot development, are being financed by the Federal Government through grants. CDA's major source of income is only from auction of the commercial and industrial plots; recovery of user-charges for water supply; conservancy charges; and taxes on property. This income is not sufficient to cater for the maintenance of Capital city. For maintenance of the City's services, Government is providing finances from non-development budgets to CDA. Efforts would be made by the CDA to generate enough resources to at least meet the maintenance needs. For this purpose, water and sewerage

charges be increased with proper arrangements made for their collections as well as the property-tax. In other cities of the Country, their major source of income is from Octroi. The possibility of levying of octroi-charges by CDA/ICTA would lead to generate substantial income, which would not only provide enough resources for maintenance of the City's services but also for carrying out some development projects.

17. There is also a need to involve private sector to supplement the availability of plots and thus check costs speculative trend in Islamabad. Specific Sectors/areas would be earmarked where the private-sector is allowed to purchase land and develop housing schemes according to CDA's Master Plan and Zoning Regulations.

PP&H Programme of Islamabad Capital Territory Administration (ICTA)

18. The ICTA is responsible for development of areas other than proper Islamabad. PP&H Sector is concerned with the provision of residential/non-residential accommodation for Islamabad Administration (Police etc.) and rural water supply/sanitation projects, for which Rs.155 million has been provided in the 8th Plan.

PP&H Programme of Civil Armed Forces (CAF)

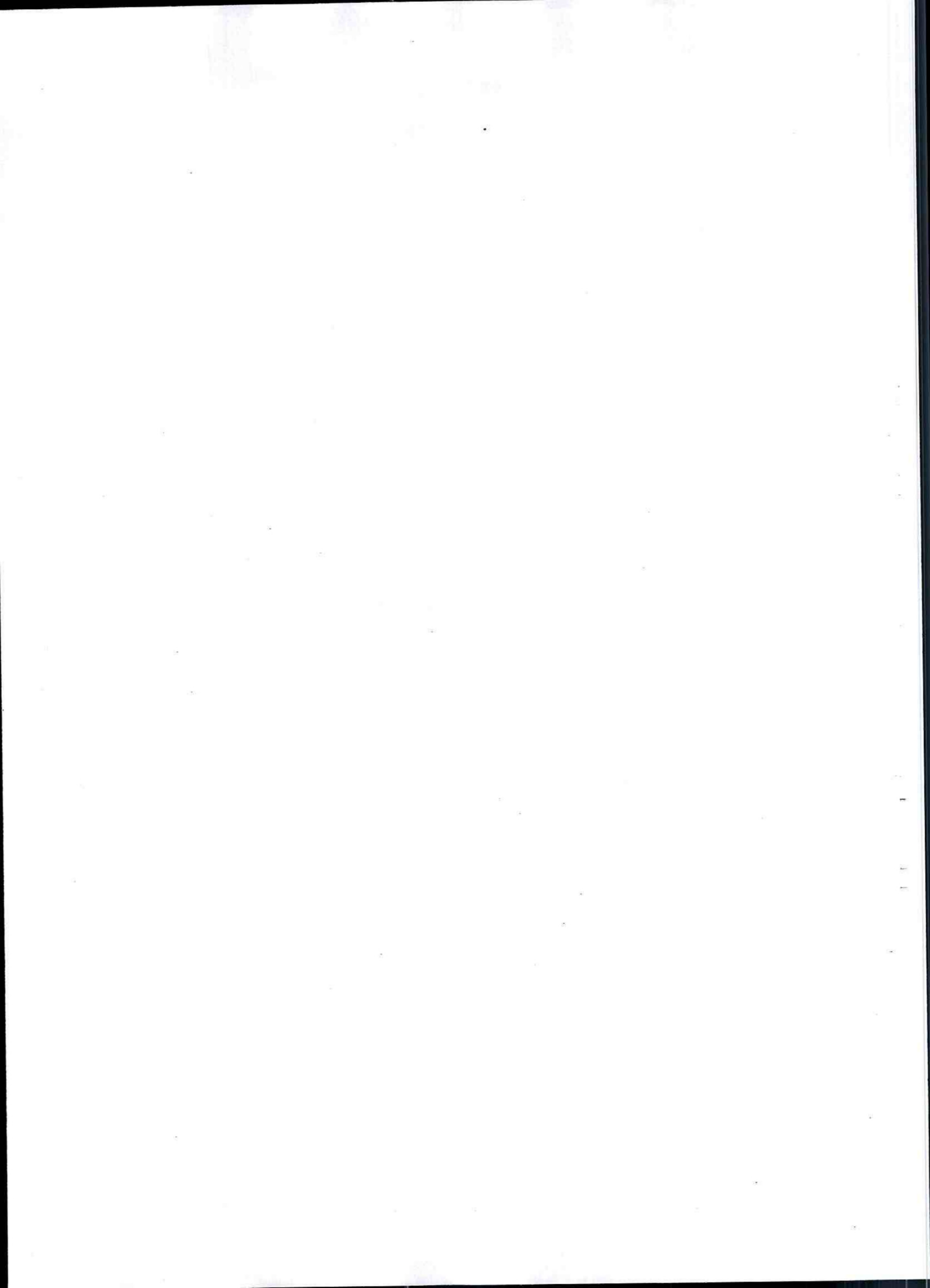
19. Residential and non-residential accommodation for Frontier and Balochistan Corps, Rangers, Coast- Guards and FIA are provided for maintaining law and order at the borders as well as to check smuggling of goods. Provision of such facilities to the Civil-Forces are of operational nature, but the requirements are being met from the development budget. During the Eighth Plan, possibility of meeting such financial requirements from the revenue-budget of CAF will be considered. However, an allocation of Rs.300 million has been provided for completing the ongoing CAF schemes.

Targets and Allocations

20. Programmes/Projects pertaining to Physical Planning and Housing Sector to be implemented are at Statistical Appendix Table-III-8.1.

21. List of specific Federal PP&H Projects to be included in the 8th Plan is at Statistical Appendix Table-III-8.2, whereas the Provincial Governments are yet to finalize respective Projects lists.

22. Financial Outlay of PP&H Sector Programmes/Projects for the 8th Plan is at Statistical Appendix Table-III-8.3, envisaging an overall investment of Rs 61.555 billion including Rs 31.433 billion from Social Action Programme's allocation for Rural Water Supply and Sanitation, and Rs 6.805 billion for Federal PP&H Schemes excluding the Special Areas.



III-9

EDUCATION AND TRAINING

Introduction

Education is an indispensable ingredient of development and a fundamental right of every individual.

2. Substantial expansion of education facilities took place in the country since independence. Enrolment at primary level increased from 0.77 million in 1948 to 12.414 million in 1993. About 60 Polytechnics, 540 colleges and 20 new universities were established. Despite these achievements in absolute terms, more remains to be accomplished. Almost half of girls and one-fifths of boys of the relevant age group (5-9) are not enrolled in primary school; the adult literacy rate is still barely 35 percent, far below that of other South Asian countries with similar levels of economic development; and there are severe gender and rural-urban imbalances both in the availability and quality of education. In general, Pakistan's social development has lagged far behind its economic growth.

3. The National Educational Policies and Five year Plans of Pakistan have emphasized universalization of primary education at the earliest possible, improving the relevance of curricula, reforming the examination system, expansion of technical and higher education, promotion of research particularly in science and technology at the universities and enhancing the quality of education in general. Despite substantial growth in the number of educational institutions, the desired goals could only be partially achieved due to rapid population growth and resource constraint. Due to ever increasing demand for quantitative expansion of educational facilities, adequate resources could not be spared for qualitative improvements. A large number of educational institutions were started without proper infrastructure. The condition of the existing educational infrastructure has deteriorated and dilapidated in the absence of proper maintenance. About 35,000 primary schools are without any shelter. More than 80 colleges and 150 vocational and commercial institutes are functioning in improvised buildings. A large number of schools lack essential facilities such as latrines, potable water, teaching aids etc. The standard of our education is far from satisfactory. The curricula lacks relevance. Methodologies of instruction and testing are outmoded. There are gender and rural-urban imbalances both in availability and quality of educational facilities. The dropout and failure rates, particularly at the terminal levels, continue to be quite high. Participation of the private sector is much below the required level. The management of the education system is centralized and without an effective system of accountability. It lacks active participation of the user communities and local bodies. University campuses are politicized and devoid of environment conducive for research. The universities are faced with serious administrative problems, large budget deficits, out-moded curricula, and lack of focus on research.

4. The Eighth Plan will therefore focus on the following major aspects:-

- i) Universalizing access to primary education for all boys and girls of 5-9 years of age.
- ii) Enactment and enforcement of legislation for compulsory primary schooling for all children of the relevant age group, wherever the primary school facilities become available at a reachable distance.
- iii) Quantitative expansion and qualitative improvement of technical and vocational education to equip the youth with demand-oriented skills.
- iv) Removing gender, and rural-urban imbalances.
- v) Reforming the management and financing of the universities, de-politicizing their campuses, and eliminating duality of their administrative control by the Provincial Governments and financial control by the Federal Government.
- vi) Qualitative improvements of physical infrastructures, curricula (by making the courses demand-oriented), textbooks, teacher training programmes, and examination system at all levels of education.
- vii) Broadening of the resource base for financing of education through increased allocations and encouraging private sector's participation in provision of educational facilities at all levels.

5. Universalization of primary education, both for boys and girls over a minimum period of time has been adopted as the main instrument for achieving mass literacy in the long run. The Eighth Plan will provide primary education facilities at a reachable distance for every boy and girl of the relevant age group. Buildings will be provided for the existing shelterless schools and classrooms will be added to the existing overcrowded schools. Resources for primary education will be enhanced through Social Action Programme. The wastage at primary school level will be minimized by reducing the drop out rate and improving the efficiency of the system through better supervision and with the involvement of local community. To increase utilization of the existing schools, specially those of girls schools in the rural areas, strong motivational campaign will be launched for parents to persuade them to send their children to schools. This will be accompanied with legislation for compulsory enrolment for children of 5-9 years age group, wherever primary education facilities become available within a reachable distance. Efforts will be made to reduce the disparities in availability of the schooling facilities for boys and girls, both in rural and urban areas. During Eighth Plan period 5.548 million additional primary school children (including 3.4 million girls) and 2.4 million additional secondary school children (including 1.0 million girls) will be enrolled. The participation rate for boys at primary level will increase from 84.8% to 95.5%, while for girls it will increase from 53.7% to 81.6%.

6. The accelerated enrolment at primary level will increase the demand for secondary education. Secondary school facilities will be expanded so as to absorb the increased output of

primary schools. At secondary level (grades VI-X), the participation rate for boys will increase from 49.7% to 54.5% and for girls it will increase from 25.6% to 30.2%. The curricula of secondary schools will be reformed to make it demand oriented. A parallel system of vocational and skill-training secondary schools will be started on experimental basis and replicated if found successful. Buildings of selected schools will also be used to provide training in vocational skills in the evening shift on demand basis to the dropouts of the general school system. Private sector will be encouraged to establish new quality education institutions. Each district, will have at least one model school for boys and each Division will have one such institution for girls in the public, or preferably, in private sector. Government will establish new model schools in only less developed districts where such institutions do not exist. The Eighth Plan emphasis will be on improving quality of all secondary schools.

7. The Eighth Plan will attempt to increase share of students going to technical and vocational institutions at the post-secondary level from estimated 100,000 to 1,50,000. For this purpose, about 30 polytechnics/ mono-technics (25 in public sector and 5 in private sector) , 150 vocational/commercial training institutes and 18 teachers training institutes will be established in the public sector. In addition other departments such as Labour Department, Manpower Division, Health Division etc. will also establish training centres. Private sector will be encouraged to set up technical and vocational training institutions through grants to be made available by the Education Foundations. Linkages will be encouraged between technical training institutions and industry for on the job training of the trainees from polytechnics and engineering colleges/universities to increase their employability.

8. Public sector programmes for increasing of the literacy rate will rely mainly on universalization of compulsory primary education and encouraging NGO's for launching community based functional literacy programmes on basis of demand, to be created through motivational campaign and by linking literacy programmes with socio-economic development programmes of various sectors of the economy. As a result of this strategy, the literacy rate will be increased from the existing level of 35% to 48% at the end of the Eighth Plan period.

9. Special efforts will be made to improve the quality of higher education. The college courses will be diversified to provide training in marketable skills such as accountancy, management, import/export trade, computer applications, co-operatives, small-scale agro-industries, etc. Research capabilities of the universities will be enhanced through provision of better infrastructural facilities, extending research grants and the staff development. The existing dual control of the universities will be eliminated. To improve the administrative efficiency of the universities, the University Acts will be properly amended. Besides this, some of the existing universities will be made fully autonomous in all respects for which suitable legislation will be passed. Government will provide special support for developing selected university department (having potential for upgradation), as Centres of Excellence, specially in newly emerging scientific fields. The budget deficits of the universities will be eliminated through increased allocation, (including creation of endowment funds), better financial control and gradual increase in the user charges. The universities will be encouraged to generate additional funds through contract researches, entrepreneurship activities, endowment funds etc. Necessary steps will be taken to depoliticize the university campuses. To improve the quality of instructions and output

of research at the universities, a system of accountability will be devised and implemented. The university courses will be transformed to make them demand-oriented.

10. Efforts will be made to divert larger share of national resources toward financing of education, particularly through Social Action Programme. Resources for education will also be enhanced through fiscal incentives and matching grants to private sector for establishment of new education institutions at all levels. National and Provincial Education Foundations will be organized on sound footing for this purpose. The user charges at post-secondary level will be gradually increased and other income generating activities will be initiated at higher education institutions. Participation of local bodies in establishment of schools in urban area will be revitalized.

Policy Initiatives

A - Restructuring

11. The existing education system is faced with serious managerial and financial problems and deficiencies in quality of education. The management and financing of the existing education system is highly centralized. The curricula lacks relevance. The quality of textbooks is far from satisfactory. The out-moded examination system which is characterized by mal-practices, provides little motivation for talented students and teachers for hard-work. The user charges at higher education level are insignificant while universities are faced with large budget deficits. During 8th Plan, suitable policy initiatives will be undertaken and implemented to overcome the above noted problems.

12. In order to improve efficiency of the school system, school education will be decentralized to district level. Efficiency of the system will be improved through motivation and better supervision with the involvement of local community who will also be made responsible for maintenance of school buildings. Efforts will be made for reforming the curricula and courses to make the courses demand oriented. Trade schools will be started as evening shifts in the existing school buildings for imparting income generating skills such as poultry, mechanical skills, farm skills, embroidery, carpet weaving, silk worm etc. Higher education courses will be diversified to provide training in marketable and self employment skills such as accountancy, import and export trade, cooperatives and entrepreneurship. The duality of control of the universities will be eliminated. Their budget deficit will be pre-empted through reforming budget control and generation of additional resources by gradual introduction of user charges and initiating suitable income generating activities. The share of students going to technical and vocational institutions at post-secondary level will be increased. More technical and vocational training institutions will be established. Incentives will be offered to small entrepreneurs for imparting training in marketable skills to unemployed educated youth.

13. In order to remove the imbalance of male, female enrolment ratio, 65% of all new schools to be established during 8th Plan will be for girls. Wherever feasible, co-educational primary schools will also be established in which female teachers will be appointed. In order to increase girls participation at primary level, text books will be provided free of cost to all girls of the rural areas in grade I. Suitable incentives will be provided for development and production

of good textbooks written by renowned educationists through the private sector. For each course, multiple textbooks will be approved while the institutions will be authorized to select any of these textbooks on competitive basis. Examination system will be reformed. A National Testing Service will be established, preferably under a reputed NGO, to develop and administer standardized tests for various educational levels. This would moderate the distortions arising from disparate examination standard operative in various institutions.

B- Incentives for Private Sector and NGO's

14. At present private sector is permitted to open educational institutions at almost all levels. Primary schools have to be registered but the certificates of most of private schools are not recognized by the Government except some secondary schools which get recognition from Boards of Secondary Education. Special legislation is to be enacted for each university. The incentives for non-commercial educational institutions are mainly in form of normal tax exemptions and, marginal grants for a few of them from the recently established Education Foundations. This is inadequate. During 8th Plan, fiscal incentives for NGO's and private sector's participation in the educational endeavor will be reviewed and made more attractive.

15. In addition, following policy actions are envisaged:

- i) The school certificate of children of most private schools are not recognized for their transfer/admission in the government school. There is no institutionalized arrangements for uniform examination at the end of grade-V for children of private primary school, specially for those studying in English Medium schools. Steps will be taken to devise a system of testing and recognition of the ability/certificate of students from private schools for their transfer/admission in Government schools at the terminal levels.
- ii) Most of the private schools are in urban cities where land is expensive and beyond the reach of philanthropist organizations and NGOs interested in opening of new schools. Incentives in form of provision of land at subsidized cost to non-profit educational institutions enrolling more than 500 to 1000 students, will be considered.
- iii) The profit-oriented technical training institutions enrolling more than 100 trainees in various vocational and commercial trades, will be declared small business and made eligible for loans.
- iv) The industries and commercial organizations having paid up the capital beyond a specified limit, will be required either to run secondary and vocational educational institutions of their own or be required to pay to the Education Foundations of the concerned Province the cost of running such institutions. Further-more donations to non-profit educational institutions should be allowed tax-rebates without any limit.

- v) In planning of all future housing schemes, both in public and private sector, provision of land for educational institutions will be made obligatory. A legislation will be enacted for this purpose.
- vi) At present there is no effective mechanism for improvement and coordination of the NGO's performance. During 8th Plan an effective mechanism will be devised for this purpose.

Management Issues

A- Management of Public Sector Institutions

16. The existing management systems of schools, colleges and universities are not responsive to the needs of students, teachers or the society as a whole. At present this is being done in a highly centralized and extremely inefficient manner. It lacks involvement of parents, community or teachers. Financing of education has also been a serious problem. The work force of about 1 million of education sector employees lacks motivation.

17. With the decentralization of the school education to the district level and participation of the local community as well as local bodies in provision, maintenance of educational facilities and supervision of educational institutions, there should be a qualitative change. In order to achieve universalization of primary education, the motivational and supervisory role of the local community will be made corner-stone, specially for increasing the participation rate of girls and reducing the dropout. The ratio of number of schools to supervisors will be reduced from the existing level of about 1:50 to 1:15. The teachers will be motivated through various incentives including national awards for outstanding performance. Management training will be mandatory for all administrators of education from secondary school levels to higher education levels.

18. The university Acts will be amended to improve administrative and financial efficiency of the universities. Some of the colleges and universities of repute will be made autonomous. The university courses will be transformed to make them demand-oriented. A system of accountability shall be devised for institutions of higher education and research. A National Council of Academic Awards and Accreditations will be established to ensure minimum standard at all higher education institutions and examinations. Vice Chancellors of universities will be appointed on recommendations of a Search Committee to be constituted specifically for this purpose. Management training will be mandatory for them after the selection. Tuition fees of higher education institutions will be gradually increased from the existing level of 1% of the recurring cost per student to 10%. Scholarships and "Qarz-e-Hasna" will be introduced to offset the fees and other educational expenses of deserving talented students. Appointment of a senior faculty member as a ombudsman to help students in solving their problems related to the university will be considered.

B- Plan Implementation

19. The targets of the earlier Plans could not be fully achieved on account of:

- i) Financial funding and plan discipline.
- ii) Procedural delays in project preparation, approval and funding.
- iii) Selection of sites and availability of land.
- iv) Mechanism for implementation of the physical infrastructure component of the projects.
- v) Delays in making the institutions operational after completion of the physical infrastructure.

20. *Financial Funding and Plan discipline:* After approval of the Five Years Plan, often the PSDP allocations do not conform to the Plan provisions and priorities. A large number of projects are approved by various forums, that can not be fully funded. Efforts will be made to adhere strictly to the Plan discipline, readjusting the priorities of the Plan projects through continuous monitoring and review in the context of financial resource position. Effective measures will be devised to check spread of resources over low priority projects.

21. *Project preparation, approval and funding procedures:* Most of the educational projects are conceived without a survey or feasibility study, clear identification of (i) location, (ii) magnitude of the population to be served, (iii) anticipated bottlenecks. Often the assumptions regarding access, availability of suitable land, contractors, skilled labour etc. are optimistic. The cost estimates are made without knowing actual site. The financial and physical phasing of activities in the PC-I is ambitious and un-realistic. Availability of properly trained manpower for execution and operation of the project is not ensured. The mechanism for implementation and supervision of the project is rarely spelled out. Approval of the project and allocation of funds is centralized at the Provincial/Federal headquarters. The procedures for approval of the projects, releases of funds and award of contracts for their implementation are lengthy and inefficient. By the time the contract is awarded, the original cost estimates as well as some of other dimensions of the project become outmoded. Often the educational institutions to be constructed are so far from the Project Directorates (or the Executing authority) that close supervision is not possible. All these factors result in slow progress of implementation and poor quality of the infrastructure. In view of these handicaps, preparation and approval of the projects for primary and secondary schools will be decentralized to the district level and those of colleges and polytechnics decentralized to the Division level. However, the Federal and Provincial headquarters will have strong monitoring networks to have an overall view and respond to difficulties.

22. *Selection of site and availability of land:* In case of schools' projects, specially for primary schools, the existing procedures of site selection are lengthy. In most projects, the actual work on site identification is started after approval of a consolidated/combined project for

establishment of a large number of schools. Then the sites are identified, selected and got approved (often at the Provincial headquarters). After decision about the village for location of a school, often availability of proper piece of land (which is to be donated by the community) becomes a problem. All these factors result in delay in starting the actual construction work. During 8th Plan, the process for site selection, acquisition of land, approval of site etc. will be streamlined and started about a year before a project is to be launched. All PC-Is will include list of final sites (alongwith transfer certificate for land) before their approval.

23. In case of urban areas, availability of land is becoming problematic due to high costs. To overcome this problem, in exceptional circumstances, funds will also be provided for purchase of land and buildings in cities. Furthermore, in planning of all future housing schemes, provision of land for educational institutions, free of cost, will be made obligatory.

24. *Implementation of the physical infrastructure component:* In Education Sector, projects are dispersed (in form of small units of construction) over large areas/regions including remote and under-developed areas. High quality contractors are not attracted to construction of schools, specially the primary schools. Supervision for quality checks is not effective. In the past, the schools constructed through Local Government and Rural Development Department (specially in Punjab) have been of poor quality. In view of this, the Provincial Governments have established Engineering Cells within Education Departments for construction and supervision of the buildings of educational institutions. However their present capacity is less than the requirements, in the context of large volume of foreign aided projects being handled by them. Therefore these educational engineering cells will be strengthened. It will also be admissible to get the construction of schools done through private sector or local community. Another outer agency (e.g. NESPAK) will be required to certify their quality of construction.

25. *Making the Institutions Operational:* Main objective of the educational projects is to utilize the physical infrastructure for human resource development in form of education and training. Provision of adequate teaching staff, equipment, furniture, and books immediately after completion of infrastructure is essential. Often there has been delay in appointment of teaching staff due to inadequate recurring budget. There is inadequate budget provision for non-salary components. During Eighth Plan, policies related to the recurring budget for educational institutions will be rationalized for optimum utilization of the facilities created through the development funds. Recruitment of teachers will be exempted from all bans and budget cuts.

Consolidation and Rehabilitation

26. A large number of educational institutions were started either without proper infrastructure or indigenous buildings rented/donated by the community. With the passage of time and in absence of proper maintenance, the condition of existing educational infrastructure has deteriorated. As a result, about 35000 primary schools are without any shelter. More than 80 colleges and 150 vocational and commercial institutions are functioning in improvised building. A large number of schools lack essential facilities such as potable water, teaching aids, library books, equipment, furniture etc. The colleges and universities have also inadequate and obsolete scientific equipment. A large number of teachers are un-trained while majority of

trained teachers need in-service training. The curricula and textbooks lack development and quality.

27. In view of above noted inadequacies, about 60% of 8th Plan allocations will be spent on rehabilitation and consolidation of physical infrastructure in form of additional accommodation, replacement of out-lived buildings, provision of furniture, equipment, library books, scientific equipment etc. In the primary education sector, about 21300 shelterless schools will be provided buildings and about 30,000 class rooms will be added in over crowded primary schools. Facilities of toilets, potable drinking water, play grounds etc. will also be added wherever necessary. About 17000 mosque schools will be converted into regular primary schools and about 42,000 existing primary schools will be consolidated. Besides opening of new secondary schools, facilities of the existing secondary school will be consolidated by provision of additional accommodation, equipment furniture books, etc. During 7th Plan period classes XI-XII were added in about 368 secondary schools without sufficient infrastructure which will be provided during 8th Plan. The technical and vocational training institutions will also be consolidated and provided additional infrastructure and new equipment. Most universities which have been suffering from problem of under funding, have only out-moded equipment and decades old library books. Every efforts will be made to provide modern equipment and up-to-date equipment and library books to them.

28. Larger enrolment and better retention in the existing school's would receive priority. This would enable the system to gear itself to efficiency of resource use. It would also balance the expenditure structures away from brick and mortar, and towards improvements in the software and teaching aids.

29. In order to improve technical education, the status of equipment in polytechnics and other training institution will be reviewed. An augmentation programme would be drawn up on the basis of this review. Evening programmes for technical training would be started on a large scale. This would ensure cost-efficient use of existing facilities, and mitigate the conflict between work and education.

30. In fact major thrust of the Eighth Plan is on quality improvement, consolidation and rehabilitation. Details are furnished under each sub-sector.

Programmes of the Eighth Plan

31. The above strategy has been translated into some specific actions in each of the priority areas of the plan. The following is a brief description of the actions envisaged in each specific sub-sector. The overall expenditure on the public sector development programme in the education sector is estimated at Rs 69.031 billion (including Rs 39.319 billion for the Social Action Programme in education). Of this, Rs 7.534 billion (Rs 0.584 billion for SAP and Rs 6.950 billion for non-SAP) is included in the Federal PSDP (Statistical Appendix Table-III-9.3). Sub-sector-wise break up may be seen at Statistical Appendix Tables-III-9.1 and 9.2. In addition, Rs 159 billion will be required to meet the cost of recurring expenditure for the eighth plan period (Rs 139 billion for the existing programmes and Rs 20 billion for new programmes).

Primary Education

32. Universalization of primary education will be given the highest priority during the Eighth Plan. By the end of the Plan period, almost all boys and girls of 5-9 age group will be enrolled in primary or mosque schools. To achieve this objective, necessary infrastructure and school places will be created at reachable distance. Policy measures will be implemented to enroll and retain the children in the primary schools. Bench-mark estimates and enrolment targets for the Eighth Plan at primary education level are given in Table-9.1.

Table-9.1

Benchmark and Target of Enrolment at Primary Level

	Benchmark (000) 1992-93	Target (000) 1997-98	Addl.Enrol. (000)	Participation 1992-93	Rate (%) 1997-98
Total	12414	17962	5548	68.9	87.7
Boys	7792	9944	2152	84.8	95.5
Girls	4622	8018	3396	53.7	81.6

(Major physical targets are in Statistical Appendix Tables-III-9.4 & 9.5)

33. One of the major reasons for low participation rate at the primary level is high drop out rate. Many children who enrol in the primary schools drop-out because they do not find the school environment congenial to their basic needs. Some of them drop out due to uninteresting curricula and harsh attitude of the teachers. Others leave on account of poverty to become earning members of the family or to extend help to the family. During the Eighth Plan, the facilities in the primary schools will be improved by providing adequate shelter, furniture, potable water, latrines, teaching aids etc. Activity oriented instructional material will be developed and provided to teachers to make the learning process interesting. Quality of teachers will be improved through better pre-service and in-service training. A strong motivational campaign will be launched to persuade the parents to send their children (both male and female) to the school. This will be accompanied with a legislation for compulsory enrolment of children of 5-9 years age in primary schools, wherever primary education facilities become available within reachable distance. To increase the girls participation, textbooks will be provided free of cost to all girls of grade I in the rural areas.

34. For universalization of primary education, it is necessary to spread the facilities of primary education to the reachable distances. It is estimated that almost every village has a boys school but only about 50% of villages have the girls schools. To remove this imbalance, highest priority will be given to opening of girls primary schools in all such villages where there is a boys school but no girls school.

35. During the recent years, there has been substantial migration of population in the agricultural areas from the main villages to scattered and distant settlements outside the villages. This is making the access of the children from these settlements to the primary school of the village more difficult. To identify the localities where access to primary educational facilities does not exist, a detailed school mapping exercise will be undertaken. A primary school will be established for a settlement of more than 300 population (1981 census), whereas a mosque school will be opened for a smaller settlement having minimum of 25 primary school age children. Wherever a separate school for boys and girls is not feasible, a co-educational primary school will be opened where female teachers will be appointed.

36. In urban areas, Municipal Committees/Corporations and Cantonment Boards have the responsibility of providing educational facilities for primary education. However, with large migration of population to the cities, the local bodies have not been able to provide primary education facilities to the ever increasing urban population. Private sector has come forward to provide facilities for the children of upper-middle and higher income groups. The children from the lower income groups have no option but to seek admission in the Local Body schools, which has resulted in over-crowding and poor quality of education. The Cantonment Boards have almost withdrawn their participation in opening of schools since the take over of the Cantonment schools by the Federal Government in 1977. During the Eighth Plan all Local Bodies including the Cantonment Boards will be revitalized to share the responsibility of providing primary education facilities in the urban areas. The Provincial governments will extend matching grants to the local bodies for this purpose from the funds to become available from Social Action Programme. Stipends will be provided on basis of merit to the students from low income families who had to get enrolled in private schools due to non-availability of seats in public schools or in quest of access to quality education.

37. At present, provision of free land for opening of primary school is the responsibility of the local community. Due to sharp increase in the cost of land, particularly in the urban areas, it has become difficult to obtain free land for schools from the local community. During the Eighth Plan, funds will also be provided for purchase of land/buildings in big cities in exceptional circumstances where land could not be made available free of cost. Moreover, in planning of all future Housing Schemes (both in public and non-profit private sectors), provision of land for the educational institutions at primary level free of cost will be made obligatory. A legislation will also be enacted for this purpose.

Secondary Education

38. Facilities for secondary education will be expanded to absorb the increased output from primary schools. For this purpose, about 2.4 million additional seats in classes VI to X will be created by upgrading primary and middle schools, establishment of new high schools and adding classrooms in the existing schools. Construction of additional classrooms and improvement of the existing buildings of the schools will also be carried out. In urban areas, second shift will be introduced in selected secondary schools wherever feasible. During the Plan period, the participation rate at the secondary level will be raised from 50% in 1992-93 to 55% for boys and from about 26% to 30% for girls. (Details are given in Table-9.2). Private sector is estimated to accommodate about 15% of the target enrolment at secondary level.

39. For qualitative improvement, the existing curricula will be reviewed and reformed, particularly that of science and mathematics. Facilities for teaching of science subjects will be improved by provision of additional laboratories and equipment and better trained teachers. In addition, a parallel system of vocational high schools will be established for imparting employable skills on experimental basis and expanded if found successful. Skills such as basic accountancy, typing, industrial arts, agricultural skills etc. will be introduced in selected secondary schools according to the requirements of the local market. Wherever regular technical teachers do not become available, local artisans/skilled persons will be engaged on a part time basis.

Table-9.2

**Benchmark and targets of Enrolment at Secondary Level
(Classes VI-X)**

	Enrolment (000)		Addl.Enrol. (000)	Enrolemnt Ratios (%)	
	Benchmark 1992-93	Target 1997-98		Benchmark 1992-93	Target 1997-98
Total:	5110	7515	2405	38.1	42.7
Boys:	3463	4906	1443	49.7	54.5
Girls:	1647	2609	962	25.6	30.2

(Major physical targets are in Statistical Appendix Table-III-9.4)

40. The policy of adding classes XI and XII to the existing secondary schools was implemented during the last two Plans. Performance of classes XI and XII in the existing higher secondary schools will be evaluated and remedial measures will be adopted wherever necessary. Priority will be given to adding classes 11 and 12 in secondary schools instead of establishing new intermediate colleges.

41. The Eighth Plan will encourage spread of quality education institutions to remote areas of the country. By the end of the Eighth Plan, each district will have a model school for boys and each Division will have such an institution for girls in the public or private sector. Private sector will be encouraged to establish the quality education institutions. Government will establish model schools only in districts where such institutions do not exist under public or private sector. Efforts will be made to upgrade the quality of all secondary schools through provision of better qualified teachers and physical facilities.

Technical and Vocational Education

Engineering Education

42. At present, there are 4 Engineering Universities and 2 Engineering Colleges in addition to a few specialized engineering institutions. Their existing intake capacity is about 4,500. Most of the Engineering education institutions function on single shift basis. During the Eighth Plan, steps will be taken to improve their utilization as well as quality of their training. The curricula of engineering education will be reviewed and newly emerging technologies will be introduced. Environmental aspects will be incorporated in all engineering courses. To broaden their resource base, the Engineering universities will undertake contract research projects and training programmes for the private sector.

43. There is a common complaint that the fresh graduates of engineering institutions do not have sufficient practical training during their studies. The curricula and instructional methodology of the engineering institutions will contain sufficient elements of project/case study approach for which these institutions will establish linkages with industries. Industrial training of engineers and technical graduates shall be regulated by legislation.

44. Taxila Campus of the University of Engineering and Technology Lahore will be upgraded to a model University for promoting research in high technology and for preparing high level engineering manpower. Private sector will be encouraged to establish specialized institutes of engineering education in the newly emerging fields of high demand. Work on establishment of Institute of Science and Technology of Pakistan (ISATOP) on the pattern of MIT will be revitalized through collaborative investments of both private and public sector. GIK Institute of Science and Technology has already begun to function. Its performance will be monitored for feed back into future planning. The intake capacity of engineering education will be increased from 4,500 at present to 5,500 during the Plan Period through better utilization and expansion of existing institutions.

45. The existing engineering universities are mostly producing under-graduate engineers. The post-graduate facilities of engineering universities are mostly under-utilized mainly due to lack of incentives for B.Sc. engineers to undertake post-graduate studies. Furthermore, the post-graduate departments of the engineering universities lack proper linkages with the industry and have been unable to seek R&D projects from the industry. This has resulted in degeneration of the most of the engineering universities to engineering college level. Necessary incentives will be provided for revitalization of post-graduate programmes of the engineering universities and for promotion of research in engineering and technology in collaboration with private sector.

Post Secondary Technical and Vocational Education

46. Post-secondary Technical Training institutions in the Education Sector fall under the following categories:

- (a) Polytechnics/Mono-technics offering 3-year diploma course of Associate Engineers.

- (b) Vocational training institutions offering certificate courses.
- (c) Commercial Training Institutes offering D.Com/C.Com course.

In addition there are technical and vocational training Centres under other Ministries/Departments such as Labour, Health, Industries, WAPDA and Women Division. Furthermore, a large number of matriculates receive technical and commercial training in the private and non-formal sector. It is estimated that, at present, the share of enrolment in technical and vocational training programmes in relation to those entering general education streams is about 30%.

47. At present general education system in Pakistan is producing graduates without functional and marketable skills which is resulting in accumulation of a large number of unemployable youths. The Eighth Plan will take necessary measures to reverse this trend and to increase the share of enrolment in technical and vocational streams from existing level of about 30% to 38%. To achieve this objective, efforts will be made to establish technical and vocational training institutions upto Tehsil level in public or private sector. The private sector will be provided incentives through Education Foundations to establish and operate technical training institutions/centres. Establishment of vocational training centres will be declared as a small business activity and will be made eligible for loans from Small Business Finance Corporations as well. In order to attract more students to technical and vocational training programmes, the status and career opportunities for technicians will be improved. The curricula of all technical and commercial training institutions will be kept under constant review and will be made responsive to the market needs, particularly in relation to the newly emerging technologies. Trade schools will be started, (particularly in the rural areas) as evening shifts in the existing school buildings for imparting income generating skills such as poultry, nursery, mechanical skills, embroidery, silk-worm rearing, carpet weaving etc. More opportunities will be provided for technical and vocational education for women. The technical and vocational training programmes will also be linked to the recently announced Prime Minister's employment programme. For promotion and coordination of technical training programmes, Councils of Technical Education will be constituted at various levels.

(a) Middle Supervisory level Technical Education

48. At present there are 60 polytechnics and colleges of technology offering three-year diploma courses in about 25 technologies. Total intake capacity of these institutions is about 12,000. The graduates of polytechnics serve as middle level supervisor and technicians. This level of training has also the potential for self employment if the existing training programmes are properly modified. During the Eighth Plan the curricula of the polytechnics will be diversified to make it more relevant to the needs of the economy and entrepreneurship. The number of polytechnics will be increased so as to have, at least, a boys' polytechnic/monotechnic in each District and a women's polytechnic in each Division. During the Eighth Plan 30 mono/polytechnics (25 in public sector and 5 in private sector) will be established. The choice of technologies in these polytechnics will be made on the basis of local and national needs. Wherever feasible, selected polytechnics will be encouraged to generate some of their resources

by adding production units. Computer education will be made a compulsory part of the programme. One year on-the-job training will be made compulsory, before award of diplomas.

(b) Vocational Training of skilled workers

49. Vocational Training Institutes offer a variety of courses, ranging from 3 months to one year, for middle and high school graduates. At present, about 200 vocational institutes with intake capacity of about 20,000 are functioning under the administrative control of Provincial Education Departments. In addition, vocational/ technical training centres are also operating under National Training Bureau, Provincial Labour Departments, Semi-autonomous and private organizations. These institutions provide pre-service and in-service training in variety of trades. During the Eighth Plan, the existing vocational training institutes will be consolidated and about 100 new institutes will be established under the Provincial Education Departments. In addition Trade Schools in demand oriented local skills will be started in the existing school buildings, in evening shift. Wherever trained teachers are not available, skilled technicians or artisans will be engaged on part time basis.

(c) Commercial Education

50. With the expansion of economic and commercial activities in the country, demand for personnel trained in commercial skills is expected to increase, both for wage-employment and for self-owned entrepreneurs. At present commercial education is offered at certificate, diploma, degree and post-graduate levels in 20 Commerce Colleges and 110 Commercial training institutes in the public sector. A large number of commercial training institutes also exists in private sector. However, demand for the professional as well as middle level commercial education is expected to increase with enlargement of the services sector. During the Eighth Plan, the commercial training facilities will be expanded by introducing commerce courses in schools and colleges. Annual output of public sector commercial education institutions will be increased by introduction of evening shifts, wherever necessary. Private sector will be extended by incentives for establishment of commercial training institutes.

51. The curricula and training programmes of commercial training institutions will be modernized and will be made demand-oriented and training in the use of computers will be made integral part of the commercial education. Selected colleges of commerce will be encouraged to develop linkages with counter-part commercial training institutions abroad. Commercial training institutions will also be encouraged to offer short courses oriented towards the immediate needs of the local community on self-financing basis. Commerce colleges and Business Education Departments of the universities will be encouraged to develop linkages with the private sector industrial and commercial establishments for placement of their students for practical training and for undertaking research projects relating to their specific problems.

Teacher Education

52. Teacher has a pivotal role in improving the quality and efficiency of education system, for which pre-service and in-service training programmes of high quality are essential. The quality of pre-service training for most of the teacher training institutions is out-moded and low

as compared to international standards. There is urgent need to update the knowledge and skills of master trainers engaged in teachers' training. The Eighth Plan programmes will review and reform the curricula and training methodology of the teacher training institutions at all levels. The teacher training programmes will emphasize the acquisition of practical skills that can be applied in actual classroom situation instead of the present emphasis on theory. To achieve these objectives, 8 existing Colleges of Elementary School Teachers will be upgraded as model institutions which will offer and disseminate modernized teacher training curricula and techniques. In addition 66 teacher training out-posts will be established at the premises of rural girls high schools to facilitate the training of female teachers in rural areas.

53. At present there are 110 institutions for training of primary school teachers and 11 colleges for training of secondary school teachers. In addition, there are about 100 teacher training units attached to secondary schools. A large number of primary and secondary school teachers complete teacher training as private candidates or through the programmes of Allama Iqbal Open University. The quality of these teacher training programmes will be evaluated during the Plan period and necessary policy changes will be made. To upgrade the quality of teachers, the entry qualification for all teacher training programmes will be enhanced. Duration of the training will also be increased wherever feasible. Pay scales of the teachers will be linked with their qualifications.

54. It is estimated that about 200,000 additional primary school teachers, 50,000 middle school teachers and 35,000 high school teachers will be required during the Eighth Plan period. The requirements of middle and secondary school teachers can be met fully from the output of the existing system. The annual training capacity of the existing primary teacher training institutions is about 27,000 which will produce about 135,000 teachers during the Plan period. It is estimated that at present there are about 50,000 unemployed trained primary school teachers, mostly in Punjab. In order to meet the remaining requirements of teachers at primary level, about 5,000 new teacher training places will have to be created. Additional requirements of the teachers will be met by opening of 18 new elementary Teachers Training Institutions and increasing the capacity of the existing institutions through expansion of their physical facilities.

55. To improve the quality of existing teachers, a variety of approaches will be adopted for their in-service training. These approaches will include distance learning through non-formal education, establishment of teacher resource centres at selected places, mobile teacher training programmes particularly for the female teachers in rural areas and on the job training through learning coordinators etc. The existing Education Extension Centres will be developed as Centres of Mobile Teacher Training. Innovative programmes of teacher training such as modular approach and audio/video cassettes containing training lessons will also be used. A system of incentives in the form of awards and recognition will be introduced by linking the career of teachers with their periodical in-service training and efficiency.

Literacy and Non-Formal Education

56. Low participation rate at primary level in the past, combined with high drop out rate and rapid population growth, has accumulated a large stock of illiterates in the population. If universal enrolment at the primary level is not achieved at the earliest and drop out of children

from the primary school is not checked, multitude of illiterates will be further added to our population every year. Even the neo-literates relapse into illiteracy due to non-availability of post literacy reading materials. Furthermore, it is quite difficult to attract the earning and grown up adults to the literacy programmes without economic incentives. Thus the illiteracy has multitude of dimensions and needs multi-pronged approach to tackle this problem. Therefore the Eighth Plan will adopt following approaches for increasing the literacy profile of the country:

- i) Sealing the new additions to illiteracy by universalization of primary education and eliminating the early drop out through various measures including legislation for compulsory primary education wherever it is accessible and launching strong motivational campaign.
- ii) Encouraging the NGOs to develop and launch community-based literacy programmes on the basis of local demand, to be created by them through motivational campaign and by linking the literacy programmes with the socio-economic development of the learners.
- iii) Including the literacy component in integrated rural development and urban community development programmes of various departments and organizations.
- iv) Encouraging publication and circulation of special news-papers and reading material for neo-literates.

57. The public sector programmes for increasing literacy rate will rely mainly on universalization of compulsory primary education and efforts of NGOs in launching functional literacy and adult education on demand basis. The NGOs will be given grants on the basis of their performance. It is estimated that the stock of literates in 1992-93 was 29.65 million while the population of 10 years and above was 83.77 million. This gives a literacy rate of about 35 percent. By 1997-98, the population of 10+ age group will rise to 96.69 million. The addition to the literate population during the five year period will be 18.83 million (10.78 million through primary education and 8.05 million through non-formal system and through the efforts of adult literacy programmes of NGOs) minus 1.97 million deaths. This implies that 46.51 million persons will be literate in 1997-98, giving literacy rate of about 48%.

Testing and Evaluation

58. A comprehensive and scientific evaluation system makes the teaching-learning process more rational and efficient. Our examination system is excessively flawed with serious weaknesses in the structure of tests and malpractices. Neither the semester system nor the annual system have been able to overcome the wide spread corruption in the examinations. This has caused serious damage to our educational standards and has made it very difficult to identify the talent for advanced training in professional institutions. During the Eighth Plan period concerted efforts will be made to establish a National Education Testing Service on sound footing, preferably through a private sector or NGO. Necessary expert services will also be acquired for this purpose. The work of the test development and research will be carried out by National

Education Testing Service in collaboration with agencies and individual experts available within or outside Pakistan. Gradually, the admission to higher education institutions will be made on the basis of performance of the students on educational tests developed and standardized by the National Education Testing Service. Other steps for reforming the examination system and eliminating malpractices in the examinations will also be taken.

Scholarships

59. A number of Federal and Provincial scholarship schemes are in operation for encouraging talent and equalizing access of the poor but talented students to the educational opportunities. Zakat and Ushr funds are used for awarding stipends to 'Mustahkeen. The existing programmes of scholarships will be continued during the Eighth Plan. However, due to extremely high cost of foreign training, the number of foreign scholarships will be gradually decreased in areas where local M.Phil/Ph.D. facilities are developed. Since cost of foreign training has rapidly increased during the previous years, concerted efforts will be made to develop selected Departments of the universities to such a level that they can offer M.Phil/Ph.D. courses within the country. In order to economize the cost of foreign training, the scholars selected for foreign training will be required to complete M.Phil. course in a Pakistani university before proceeding abroad for Ph.D. in foreign universities. No foreign scholarship for M.Sc. courses will be provided from the domestic resources. Cost of foreign training will be recovered from all those who do not complete Ph.D.

Curricula and Textbooks

60. The quality of the existing curricula and textbooks is far from the satisfactory. In order to make the curricula more relevant to the learners needs, a new curriculum development cycle will be initiated to encourage enquiry, creativity and analytical thinking through project oriented and problem solving approaches in teaching. The curricula of technical and vocational institutions will be related to the employment market and self-employment. New concepts of immediate importance such as environmental education, health education and population education shall be integrated into the school curricula. The textbooks will be revised and updated to incorporate new knowledge using graded vocabulary and pedagogical approach compatible to the age level of the learners. Incentives will be provided for development and production of good textbooks by renowned educators. For each course multiple textbooks, to be produced on competitive basis, shall be approved, while institutions will select any of these textbooks.

Educational Supervision and Administration

61. In order to improve the efficiency of our education system, decentralization of its administration, planning and implementation is necessary. Planning and management of primary, middle and high schools will be decentralized to encourage greater grass-root participation. Educational supervision will be further strengthened by appointment of more supervisors and by setting up of Local Education Committees upto the village level. Management training will be made mandatory for all categories of educational administrators from school education to higher education. Project planning, implementation, monitoring and evaluation will be made essential components of these training courses.

Library Services

62. During the Eighth Plan, adequate funds will be provided for development of both public and institutional libraries. It will be ensured that all the development schemes of educational institutions provide adequate funds for purchase of upto date professional books and journals. The libraries will provide sufficient reading material on new branches of knowledge to the students. Development of quality books in science and technology will be encouraged and selected books in these fields will be translated into Urdu and made available to the libraries at reasonable cost. Necessary measures (including allocation of adequate funds) will be adopted to improve the utilization of the libraries.

Media in Education

63. New knowledge is changing so fast that rapid communication of the new developments in science and technology to the students through the textbooks alone is becoming difficult. Availability of electronic technology more widely and at cheaper costs has made it possible to disseminate the new knowledge rapidly through the electronic media. During the Eighth Plan, special programmes of video lessons based on school and college curricula, particularly on complicated topics of science and technology will be produced and disseminated through electronic media. Copies of these video lessons will also be made available to libraries and individuals on non-profit basis for use through VCR etc. Special enrichment programmes of new scientific disciplines will be made accessible to the learners both through electronic media and video cassettes. Besides intensive use of studio facilities available under the Second Educational TV Channel, the production facilities at AIOU will also be updated.

Higher Education and Research

College Education

64. Majority of the students in the existing degree colleges are enrolled in intermediate (or higher secondary) classes, with the result that degree level courses do not receive adequate focus and resources. In order to raise the standards of degree level education, the intermediate classes need to be gradually delinked from the degree colleges and the existing two-year degree courses need to be converted into three-year honours degree courses. During the Eighth Plan, degree level education will be re-structured by offering 3-year honours courses in selected colleges in order to enhance employability of the graduates.

65. The college curricula will be diversified and made demand-oriented. Emphasis will be on improvement of quality of instruction and introduction of courses in the areas of high demand in the employment market. These may include courses related to commerce, trade, accounting, establishment and management of entrepreneurship, marketing, cooperatives, farm management etc. In the recurring budgets of colleges provision will be made for employment of part time teachers from the local market for such courses. Efforts will be made to channelize higher percentage of students in job-oriented courses.

66. During the Eighth Plan selected intermediate colleges will be upgraded to degree level. For optimum utilization of available facilities, evening shifts will be introduced in colleges wherever feasible. Private sector will be encouraged to establish new colleges with focus on demand-oriented areas. Colleges of high repute will be given autonomous status for developing them as models of quality education institutions at degree level.

67. At present teachers of college education are recruited without any pre-service training in pedagogy and have rare opportunities of in-service training. In order to improve the quality of classroom teaching, in-service training courses will be arranged for the college teachers during summer vacations.

68. In order to improve the efficiency of college education, an effective system of accountability, both for the teachers and students, will be devised and introduced. Campus discipline committees comprising of parents, teachers, administrators and notables of the areas will be set up to deal with problems of indiscipline and campus violence. Adequate provision will be made in the recurring budget of the colleges for consumable, library books and sports.

University Education

69. Our university education is characterized by low quality, lack of relevance to the needs of 21st century, indiscipline, campus closures due to violence, budget deficits, faulty examination system, absence of effective accountability system and insignificant output of quality research. The courses are outmoded and supply-oriented rather than demand-oriented. There is little emphasis on the application aspects. The university graduates lack employable skills. The universities have been unable to keep pace with recent advances of knowledge in science and technology as well as in social sciences. In view of this, the university education needs a new look and complete overhauling. The Eighth Plan will focus mainly on improving quality and increasing the external and internal efficiency of the university education. The Eighth Plan will also upgrade quality of research through staff development and provision of better physical facilities, scientific equipment, library books, and upto-date journals.

70. At least two potential departments in each university will be upgraded as Centres of Advanced Studies to make them capable of conducting quality research and offering M.Phil and Ph.D. courses. The universities will be encouraged to establish linkages with the industry and commercial organizations through contract research on specific problems. The universities will also be encouraged to develop linkages with counter-part foreign universities of repute to undertake combined research projects and teacher exchange programmes. Special efforts will be made to promote new linkages with the universities of Central Asian Muslim Countries. Facilities of National Institute of Modern Languages will be used to overcome language barriers.

71. At present the universities have serious administrative, financial and disciplinary problems. Some of the problems have been attributed to the out-moded university Acts in vogue. Other problems arise due to duality of control (Administrative control by the Provincial Governments and financial control by the Federal Government), highly subsidized user charges, politicized campuses, out-moded curricula, lack of adequate devotion on the part of teachers and defective examination system. During the Eighth Plan period the university Acts will be revised

to facilitate their effective financial and administrative management. The duality of the control of the universities will be removed. The University Grants Commission will be given more powers to oversee the academic standards. For this purpose a National Council of Academic Awards and Accreditation will be established. The university departments that have become obsolete will be closed down in a phased manner and their physical facilities will be used for starting newly emerging disciplines. Courses offered by the university, most of which are presently supply oriented, will be made demand-oriented.

72. One of the reasons for financial deficits and mis-use of the campus facilities is highly subsidized rates of user charges. At present the university fees constitute only about 1% of the recurring expenditure. The subsidy on higher education will be reduced by increasing the tuition fees gradually from the existing level of 1% of the recurring expenditure to 10%. The maintenance cost of hostel facilities will be fully recovered from the users. The financial position of the universities will be improved by eliminating their budget deficits through increased allocations and better financial control, creating endowment funds, encouraging them to undertake contract research programmes and other income generating activities.

73. Out of 20 existing universities, 12 universities were started after 1970. Due to thin funding the campuses of 10 universities are still to be completed. In view of the resource constraints, highest priority will be given to completion of essential facilities of the existing campuses. The enrolment capacity of the existing universities will be expanded through inter departmental utilization and integration of various departments at the same campus. No new University will be established in the public sector. Private sector will be encouraged to establish universities or graduate schools in the newly emerging fields.

74. To promote research, provision of separate non-transferable funds will be made in the recurring budget of the universities for purchase of consumable materials, library books and journals for research. During 8th Plan, Rs 1 billion will be earmarked for this purpose out of Iqra fund. The university departments will be encouraged to generate funds for promotion of research activities of that department by undertaking research projects etc. These funds will be kept under a separate revolving fund which will be at the disposal of that department. The curricula of the university courses will be revised and updated keeping in view their relevance to the needs of the country and the employability of the skills. Special emphasis will be laid on application of the theoretical knowledge imparted in various disciplines and more courses will be offered in applied sciences.

75. The quality of university education among other things, also depends upon the quality of students admitted. Admission in the universities will be selective and purely based on merit. Every student will be required to take standardized test in the relevant discipline. The National Education Testing Service will play a pivotal role in development and administration of the standardized tests. In educational evaluation, emphasis will be shifted from the existing practice of testing the capabilities of reproducing the subject to testing the ability to apply the theoretical knowledge in the problem situations. All possible steps will be taken to eradicate cheating in the examinations.

Financial Allocation and Resource Generation

76. The proposed Eighth Plan development programmes in the public sector are estimated to cost Rs 69.031 billion (including Rs 39.319 billion for Social Action Programme in education). Of this Rs 7.534 billion (Rs 0.584 billion for SAP and Rs 6.950 billion for non-SAP) is included in the Federal PSDP (Statistical Appendix Table-III-9.2). Sub-sector-wise break up may be seen at Statistical Appendix Table-III-9.1. In addition, about Rs 159 billion will be required to meet the cost of recurring expenditure for the Eighth Plan period (Rs 139 billion for the existing programmes and Rs 20 billion for the new programmes). This level of expenditure will necessitate strong measures for the cost recovery and resource generation. Following measures will be taken for this purpose:-

- i) Public sector allocation for education will be increased. Allocation for basic education will be accelerated through Social Action Programme. Provincial governments are expected to enhance their expenditure on basic education, under incentives to be provided by the Federal government under Social Action Programme.
- ii) Federal and Provincial Education Foundations will advance grants/loans to the private sector NGOs for establishment of new educational institutions, particularly in the rural areas. The Education Foundations will also receive grants from the Social Action Programme for promotion of basic education and literacy through NGOs.
- iii) Iqra surcharge will be properly organized under a separate fund. Its proceeds will be credited to an educational fund to be used solely for educational development.
- iv) Private sector will be encouraged to establish educational institutions at all levels through tax exemptions, loan facilities and grants. The NGOs which establish or upgrade the educational institutions in the National or approved regional language as medium of instruction, will be provided matching grants upto 50% of the cost.
- v) In all future residential and housing schemes, compulsory provision will be made for free land for the primary schools, the cost of which will be recovered from the allottees as development charges.
- vi) Local Bodies particularly Municipal Corporations and Cantonment Boards, will be re-activated to provide basic education facilities in their areas. They will be encouraged to allocate more resources for establishing and running primary and secondary schools through generating additional resources exclusively for educational development in their areas.
- vii) Fee structure and other user charges will be rationalized, particularly in higher education institutions.

- viii) The universities and other higher education institutions will be encouraged to create endowment funds.
- ix) Industries and companies with paid up capital of Rs 100 million or more will be required to establish educational institutions upto secondary level.
- x) Establishment and running of technical and vocational training institutions will be declared as small business activity and they will be made eligible for loans from Small Business Corporation.

III-10

HEALTH AND NUTRITION

Introduction

In spite of steady improvements in the health sector over the years the position is not yet satisfactory. The health status of the nation is characterized by a high rate of population growth of around 3% per annum and infant mortality rate of 86 per thousand live births. The major killers are diarrhoea and pneumonia in children, complications of pregnancy in women of child bearing age, accidents in adults and cardiovascular disease and cancer in the elderly. Drug abuse has emerged as a public health problem while malaria and tuberculosis continue to be a potential threat. Communicable, infectious and parasitic diseases remain a severe burden although recent gains have been made especially under the Expanded Programme of Immunization. Dental caries and gum diseases are on the increase. Cavitation of teeth affects children more than other age groups. Gums diseases affect a large number of population causing premature and massive loss of other wise sound teeth by the age of 40-50.

2. At present there is one doctor for 2,330 persons one dentist for a population of 49,600, one primary health care facility for 14,900 persons (rural) and one hospital bed for 1,600 persons. Statistical Appendix Table-III-10.1 gives some details of the facilities available during 1993.

3. The problems being faced by the health sector include:-

- a. inadequate primary health care (PHC).
- b. high rate of population growth.
- c. prevalence of communicable diseases.
- d. managerial deficiencies.
- e. inadequate funding.
- f. Manpower imbalances.

Besides there are other contributing factors like malnutrition, inadequate water supply, lack of intersectoral coordination and environmental pollution.

4. **Primary Health Care:** In the rural areas Basic Health Units and Rural Health Centres (BHUs/RHCs) have been set up to provide PHC. However, they are a long way from realizing their service goals. At the village level there is no organized public sector health system and no linkage with the dai. There is no community involvement with the management of health services which is contrary to the basic philosophy of PHC.

5. In the urban areas PHC is provided through PHC facilities of local government and through outpatient departments of secondary and tertiary hospitals. These health outlets have serious shortage of medicines, equipment and work space.

6. **High rate of population growth:** The population of Pakistan has increased nearly four times since independence. Most of the increase took place during the last two decades. The country is in the middle of a classical demographic transition. Mortality in general has dropped as a result of modern medical practices and rising living standards. Fertility has not yet reduced. The result is a very high rate of growth of the population. The population consists predominantly of young age groups so that as much as 46 percent of the population is constituted by people under the age of 15 years. If to this were added the percentage of women in the child bearing period of life then almost 50-60 percent of the population would consist of individuals in the biologically vulnerable period of life. The implication of such a demographic pattern on the health programme are obvious viz maternal and child health (MCH) services should feature strongly in the nation's health programmes.

7. **Prevalence of communicable diseases:** Communicable diseases can be considered under three headings:

- a. **Preventable Infectious Diseases:** According to a Joint Review (GOP/International Agencies) 71 percent of the children were fully immunized against six preventable diseases of childhood in 1990. The same percentage of mothers were immunized against tetanus in the corresponding period. It is expected that the coverage is around 80 percent during 1993. The use of oral rehydration salts (ORS) in diarrhoea is estimated at 85 percent. Programmes for control of mortality from acute respiratory tract infections are well under way.
- b. **Chronic Infectious Diseases e.g. tuberculosis and leprosy:** The number of open cases of tuberculosis is estimated at 0.12 million. The situation regarding leprosy is estimated at 30,000 cases. The approach in these chronic infectious diseases is by means of adequate case detection and early treatment to render the individual non-infectious, so as to reduce the reservoir of the disease in the community.
- c. **Parasitic Diseases:** These include intestinal worms and malaria. While there is a Malaria Control Programme, programmes for common parasitic diseases except for guinea worm eradication on a community basis have not been seriously thought about.
- d. **Prevention and Treatment of Blindness:** Blindness is a disabling disease. It has been estimated that blindness, in the majority of cases, is a preventable disease. It is proposed to undertake a comprehensive study to assess the magnitude of the problem, find out its causes and prepare a national programme for prevention and treatment of blindness during the 8th Plan period.
- e. **Prevention and Treatment of Diabetes:** Diabetes poses a serious health hazard. It is proposed to undertake a survey to assess the incidence of this disease, and

prepare and implement a comprehensive plan of prevention and treatment of diabetes during the 8th Plan period.

8. **Managerial deficiencies:** Doctors and paramedics do not get any training in management. There is only one institution in the country which imparts Diploma in Public Health (DPH) and Diploma in Health Administration (DHA). It has a limited capacity of 50 enrollment per year. Course curriculum is outdated and the institution is poorly equipped and staffed. Most managers learn management skills and technique on the job. There are no management information systems limiting the information available for appropriate decision making.

9. **Inadequate funding:** Combined public and private expenditure on health sector is around 3.5 percent of GNP. Public sector accounts for less than 1.0% of GNP. Another serious expenditure problem is that investments in health infrastructure cannot be maximized because of shortage of funds for salaries, drugs and maintenance. It is estimated that about 60 percent of the recurring budget is consumed by salaries.

10. Public and private spending is out of balance; with a large private sector making up the shortfall in public spending especially in urban areas. Very little expenditure is covered by insurance or risk sharing. Most of the private sector expenditure is for the treatment of common diseases, secondary care and limited tertiary care. The role of the private sector in promotive and preventive care is limited.

11. **Manpower imbalances:** Pakistan has an apparent surplus of doctors. Non physician medical staff particularly females are in short supply especially in rural areas. The annual output of doctors from 17 medical college is about 3587. Rather than an absolute surplus of doctors there seems to exist a mismatch between the production of doctors and the employment/absorption capacity of the public and private sector. In addition there is a geographical maldistribution with high concentration in urban areas. The teaching hospitals are concentrating on the training of a medical scientist capable of performing well in the diagnosis and treatment of disease in the individual but failing to grasp the issues involved in the delivery of health care to general communities within a limited budget.

12. The existing stock of nurses available within country is estimated at 21,068 The annual output is 2052. There is a high attrition rate of nurses which adds to the chronic shortage of this cadre.

13. The number of paramedical is insufficient to the requirements of the country. Most paramedics except for lady health visitors are male. The training levels of most of the paramedics is poor.

14. The number of paramedics available in the country is just over 2000 while the number of retail chemists/druggists is estimated to be 40,000. Few pharmacists enter government service or work directly in retail outlets. This deficiency is filled by pharmacy assistants. There is a shortage of pharmacists in hospitals.

15. Overall there is a lack of career structure for doctors, nurses, paramedics and other health professionals. The lines of upward movement for all cadres are poorly developed.

Crucial Issues

16. There are two crucial issues that characterize the problems in the health situation. These are:

- a. **Equity:** The provision of health services is inequitable. Although rural dwellers comprise two-thirds of the population, the majority of health services are located in urban areas. Recent attempts to offset this bias by developing primary health services in rural areas have met problems of under-staffing, under-equipping and under-utilization. The urban poor are also badly served. The cost of health care to the poor is high, and any health care in many cases is inaccessible for reasons of cost or distance. Women and children suffer disproportionately from this shortage.
- b. **Effectiveness:** Poor effectiveness is demonstrated by the poor health statistics, under-utilization of rural health facilities and the continuing problems of malnutrition and preventable diseases.

Policy Initiatives

17. With a view to balancing the rural - urban structure in health care and provide services at the door step, a large cadre of health workers in the rural areas is being organized. Under this programme a Community Health Worker (CHW) is proposed to be provided in each village.

18. Efforts will be made to improve the quality of services/care by creating a balance of promotive, preventive and curative care and removal of inequities. Imbalances in the health manpower will be reduced and management weakness of the health system addressed. The public health sector will be decentralized.

19. Economic Coordination Committee (ECC) of the Cabinet has set up a Committee to review the manufacture, import, sale and quality of drugs and medicines in Pakistan. The Eighth Plan will adopt the guidelines given by the ECC.

20. A paradox in the production of dentists is that while the dentists population ratio compares unfavorably with the countries at same stage of development, there is unemployment of qualified dentists in the country. There appear to be two main reasons of unemployment of dentists. In the first instance, the expansion of dental care facilities in the public sector has been very slow; secondly the private sector has not been given adequate incentives to attract dental graduates for establishing dental clinics. The cost of establishing a dental clinic in the private sector is beyond the reach of most of the qualified dentists as it needs an initial investment of not less than Rs.400,000. The private dental sector would therefore be actively supported only if promotional measures are initiated by the Government.

21. **Mental Health:** The guiding principles in the field of mental health care would include:
- Decentralization of mental health care services involving delegation of mental health promotion from specialist to general health personnel;
 - Wide coverage of the population by delivering mental health care services in primary health care.
 - Training in mental health for mental health care personnel at different levels for carrying out appropriate tasks.
 - Integration of mental health promotion with social services and collaboration with non-governmental organizations.
22. **Cancer Control:** Cancer is a multistage process spread over about 20-30 years. Rapid progress in better methods of detecting cancer during the long period between initiation and clinical presentation are expected to greatly improve the chances of early detection and a complete cure of cancer. This is secondary prevention. It is imperative that early detection services are backed up by appropriate treatment facilities.
23. The Eighth Plan proposes the following steps for cancer control:
- Establish cancer registries: The existing hospital based registries be made permanent and a registry should be established in each major city. Later a few population based registries should be established.
 - Improve early detection and treatment facilities: Each teaching and district hospital should have early detection facilities for the five commonest cancers in males and the five commonest in females in that community. For each of the ten targeted cancers adequate treatment facilities should be available in each teaching hospital.
24. Besides early detection and treatment cancer control measures will emphasize educating the public about primary and secondary prevention of malignant tumors. This will be the responsibility of MOH and the provincial health departments.
25. **Non Government Organizations (NGOs):** The number of NGOs is estimated at more than 8000. Of these 6000 are operating at local levels, about 2000 at division, district and city or tehsil level. Small scale NGOs are numerous but local. Due to their small size it is difficult for them to interact with the government and donor agencies. The few large scale NGOs are well established, professionally run and in general well funded. They have expertise to approach and liaise with the government and international agencies. While NGOs have not been particularly effective in several areas of health, it is quite clear that they will have to play an increasing role not only in the tertiary care services but also in secondary and primary care. Specific areas where NGOs can play a supplementary role are medical education, PHC at the community level, TB control, leprosy control and MCH services.

26. The Eighth Plan will encourage NGOs in assisting the Public Sector for specific activities. The NGOs would be funded through Health Foundation.

27. **Private Sector:** The private sector will be facilitated to expand its services and develop mechanism for quality control.

28. **Users Charges:** The aggregate public sector expenditure on health picked up very slowly and gradually from the low percentage of 0.4 to 0.6 of GNP in the early seventies to 1.0 percent of GNP in 1987-88. This declined to 0.81 percent of GNP in 1992-93. The health expenditure is generally lagging behind due to overall funding constraints. The recurring expenditure, although relatively protected is also under considerable strain. The more obligatory liability of the growing salary budgets is sucking away funds from commodities and services as the total budgets are not growing adequately.

29. This raises the issue of shifting some recurrent burden to the users or to the private sector. This applies particularly to the hospitals which consume major share of the non-development budget. Deliberations are needed to explore which modalities of user charges will meet with less public resistance relative to their revenue generating potentials.

30. Apart from direct out of pocket user charges, alternate systems of social financing like health insurance, or increased diversion of Zakat funds to the health care of the indigent have to be considered and a workable implementation strategy devised. Government should pay the cost of care being provided by the public sector hospitals for its employees so that equity could be maintained.

Rehabilitation and Consolidation of Physical Infrastructure

31. Strategy in the 8th Five Year Plan have been chalked out to re-habilitate and consolidate the physical infrastructure for the primary health care by providing equipments, proper water supply and electricity and skills enhancement of staff through, Family Health Projects I and II financed by the World Bank, Third Health Project and Health Care Development Project financed by Asian Development Bank and improvement of medical equipment project financed by JICA.

32. **Physical Infrastructure:** Physical infrastructure during the plan period includes strengthening and upgradation of 3874 BHUs, 492 RHCs and Manpower output of 17,300 Doctors, 925 Dentists, 18000 Nurses and 48,500 Paramedics.

33. **MCH in Primary Health Care:** Maternal and child health interventions are reasonable at tertiary care/divisional headquarter institutions. However, their infrastructure and functional implementation is poor at the peripheral level. In view of the above, it is proposed that:

Rural health centres be made functional in letter and spirit i.e. staff, equipment and support facilities;

- One properly trained/qualified lady medical officer in RHC be designated as 'MCH' medical officer and supported with adequate number of paramedical staff;
- The above 'MCH unit' will serve as referral centre for the relevant BHUs, in cases of all maternal and child health referrals including obstructed labour;
- Family planning advice, including performance of various procedures be part and parcel of this unit.
- In view of the fact that vulnerable groups (mothers and young children) are the biggest sufferers, it is proposed that the MCH skills be improved through:
 - * Relevant undergraduate medical education as well MCH training (including family planning) at various public health institutions.
 - * Training and refresher courses for the existing personnel.
 - * Supervision and monitoring of the above activities, through properly trained personnel.

34. **Health Education:** Success of all health programmes depends on a strongly motivated public to make timely use of health services and to work for the improvement of their own health.

35. The effectiveness of health education programmes has been demonstrated in EPI, CDD and anti-smoking campaign. The knowledge level in EPI has gone upto 85 percent in 1991 as compared to 10 percent in 1982. The intensive health education campaign has been adjudged to be a major contributing factor towards the achievement of high coverage of immunization in children from 5 percent in 1982 to 71 percent in 1991.

36. The Eighth Five Year Plan will stress the following improvement in health education and communication (HEC) component:

- Chalk out a composite long term plan of action for HEC.
- Train health manpower at all levels in techniques of interpersonal motivation for healthy living styles.
- Produce quality health education materials.

37. The focus of health education activities during the Eighth Plan will be on MCH care i.e. Safe Motherhood and Child Survival. HEC will be an important component of all PHC activities.

38. **School Health:** School Health Service was initiated during 1987. The basic concept of the service is preventive, health education and screening/referral. The Seventh Plan recommended (i) a complete medical check up at entry level and (ii) a comprehensive quarterly medical check up of school going children. The programme has not made any appreciable progress during the Seventh Plan except for posting of doctors. This is (perhaps) because of the fact that the programme was not oriented properly towards preventive and health educative activity. The Eighth Plan will make a careful study of the programme and reorient it towards healthy lifestyles of the school children with the assistance of school staff.

39. **Primary Health Care (PHC) in the rural areas:** In addition to the existing system of providing PHC at BHUs and RHCs a programme of community health workers (CHWs) will be introduced to disseminate PHC to the community. The CHWs, selected by the communities will be trained and supervised by the professional staff of Basic Health Units/Rural Health Centres who will be adequately trained and equipped for this function. The modalities for training and support will be carefully worked out. The communities will be involved from the very inception of the programme with the intent of making the programme community based and community owned. CHWs will act as a bridge between the community and the health units which at the moment appear isolated from their catchment populations. BHUs/RHCs will become an integral part of the programme.

40. PHC in all major urban areas i.e. Corporations and Municipal Committees will, in addition to hospitals, be provided by Urban Health Centres (Mohallah Dispensaries). These centres will be staffed and maintained by local bodies. The provision in the Eighth Plan reflects subsidy to the local bodies to take up some of their financial liability. A total of 616 Urban Health Centres are being proposed for the Eighth Plan.

41. To improve referral care and bring services closer to villages more than 4500 health facilities in the rural areas will be upgraded and made fully functional. Upgrading will involve availability of staff, improvement of skills of staff and adequate provision of equipment and transport. Upgradation will also involve provision of adequate amounts in the non-salary component of the recurrent budget so that the functionaries of RHC's/BHU's do not run into operating problems. Rural Health Centres and Basic Health Units have, during the past, grown in numbers and size. It is now imperative to improve their quality of services and quality of manpower.

42. Eighth Plan emphasis on establishment and strengthening of public accountability system through Health Care Development Project assisted by the Asian Development Bank.

43. Expansion in hospital beds will be selective with emphasis on improvement of function rather than numbers. However, with a rapid population growth and "health transition" of the population, tertiary care, will as of necessity be emerging as a priority area and provided for.

44. **Primary Health Care in Rural Areas/CHWs Programme:** Policies for "Health for All by the Year 2000" envisage primary health care (PHC) as the crucial strategy to attain health improvement goals that are linked to socio-economic development. Within PHC the use of community health workers (CHWs) is seen as one of the major ways to implement primary

health care. Community health workers are viewed as key to attaining the acceptability, affordability and accessibility of primary health care. CHWs are workers who are:

- * Indigenous to the settlement or the social class of those to be served;
- * Trained to function at the grass root level of health care;
- * Based in rural and in some cases urban, communities;
- * Trained to work closely with the communities they serve, so as to involve communities in the process of improving their own health.
- * Charged with tasks such as:
 - Maternal and child health care including family planning.
 - Collaboration with EPI teams for getting all children vaccinated against T.B. polio, diphtheria, pertussis, tetanus and measles;
 - Promotion of Oral Rehydration Therapy (ORT) during diarrhoeal episodes;
 - Counselling the families on the need of adequate supplementary food for infants between 4-6 months and later;
 - Management of cases of Acute Respiratory Tract Infections (ARI).
 - Provision of health education;
 - Promotion of good hygiene and proper sanitation in the village;
 - Identification and referral of common/manifest mental illnesses.
 - Appropriate treatment (including referral) of common ailments and infections.

45. The country has already experience with quite a few pilot, or prototype, CHW demonstration projects, centered on the use of community health workers. These projects have helped in identifying parameters involved in community based health programmes. Keeping in view the urgency for disseminating PHC, the Eighth Plan will establish CHWs programmes all over the country. A beginning will be made in all villages with more than 2000 population. While issues like selection, training, supervision, supplies, support, motivation and linkages with health services will have to be worked out and these can be different for different situations. It is proposed that CHWs should not become public functionaries.

46. **Prime Minister's Programme for Family Planning & Health Care:** The existing services through the primary health care system have been found to be inadequate with respect to coverage and effectiveness. This is due to the non-availability of health personnel with special reference to female Family Health Staff, the high rate of absenteeism, the non-employment of doctors and other staff, the poor quality of services and the inconvenient location of the primary health care units.
47. In order to make the best use of these services it has been observed that a link between the basic health units and the community should be established so that the rate of utilization of the primary health care system can be improved. Community health workers should be an integral part of any Primary Health Care System. However, in the past, for a variety of reasons, this has not happened. To make up this deficiency Prime Minister's Programme for the deployment of 33 thousand Female Village Health Workers for family planning and primary health care services delivery has been initiated.
48. The Village Health Workers will receive comprehensive training, initially for 3 months followed by one week every month for a period of 12 months. After 3 months training the workers will be employed on a contract basis at the rate of Rs 1200/- per month. Transparent criteria for the selection of these Health Workers have been laid down.
49. The VHWs will be placed in the village of her domicile. She will have at least 8 years of schooling and will be between the age of 20-45 years. The training sites will be the Basic Health Units and the Rural Health Centres so that these female VHWs will have no inconvenience coming to the location of the training and orientation.
50. Each VHW will be provided with a kit which will contain essential drugs and family planning supplies i.e. condoms and pills. The major functions of these VHW will include counselling and motivation of the community to utilize the existing services, in addition to the services provided by the health workers. They will also be involved in promoting better nutrition of mothers and children and growth promotion.
51. The entire programme will continue for 52 months through federal funding and there-after the provinces will be requested to sustain the programme.
52. The long term objective will be to have a trained CHW (female) for each census village. The programme for training of birth attendants will continue.
53. Training and maintaining CHWs will be a big challenge. It is proposed that Community/Village Organizations (VOs) should be functional before training starts. The VOs should then select the people to be trained, supervise them, set standards of service and the price to be charged, if any. The Eighth Plan will make a modest beginning by selecting two districts in each province initially and spreading the programme gradually learning from experience gained.
54. **Primary Health Care in Urban Areas:** In order to make the health care system in the urban areas comprehensive and effective, the communities, the local councils and the non-

government organizations need to be involved in an organized manner. Pakistan has a total of 2 Metropolitan Corporations, 13 Municipal Corporations and 153 Municipal Committees. Most of these are already playing a role in the provision of primary health care facilities to urban population of their cities. The Eighth Plan will enhance their capabilities by providing subsidy/grant for establishment of Urban Health Centres/Mohallah Dispensaries. The long term objective will be 100 percent coverage i.e. at least one PHC facility for each ward represented by City Fathers.

55. Each ward health centre/mohallah dispensary will extend its outreach by involving the community intimately i.e. it will explore the possibility of training of female CHWs. This would be particularly useful for family planning activities where interpersonal relationship may be a major factor for increasing FP activities.

56. *MCH in Primary Health Care (EPI/CDD/ARI)*: EPI in Pakistan was started in 1979. In 1982 the programme was implemented under the name of Accelerated Health Programme(AHP). AHP also included the components of CDD and training of TBAs. The programme has made good progress with improved coverage of immunization and consequent reduction in morbidity and mortality due to immunizable childhood diseases. Presently EPI coverage is being concentrated among children below 1 year of age. Over all policy and strategies remain in line with global strategies i.e. eradication of polio by the year 2000 eliminating tetanus neonatorum and reducing measles to the minimum possible level by the year 1995.

57. The programme for CDD previously focussed on awareness of oral rehydration salt, availability of ORS and training in correct clinical management. During the Eighth Plan the programme will concentrate on reaching a larger number of health care providers with practical training in management of diarrhoea including home based oral rehydration therapy.

58. ORS production capacity is sufficient in Pakistan. However, CDD programme funds are not enough to provide ORS free of cost. Since the programme will be an integral part of the Social Action Programme it will continue to provide 15-20 million packets of ORS annually. ORS will be allowed to be sold through all commercial outlets, and not just through chemists' shops. With the promotional campaigns this will ensure its availability for most of the population. Efforts would be made to promote cereal based Oral Rehydration Therapy (ORT) so that ORT becomes household remedy.

59. Control of ARI: An estimated third of infant deaths occur due to acute respiratory infections. National ARI Control Programme aims to reduce mortality due to pneumonia in children below 5 by a third of the 1990 level. The programme strategies will include training in case management starting from the top. This approach has been chosen in order to obtain the commitment of pediatricians and other senior health professionals to simplified clinical management, conscious of the fact that training will take time to reach the community level where the bulk of the deaths occur. Training needs have been worked out in terms of (a) ARI programme management; (b) supervisory skills; (c) case management; (d) training for medical officers based in RHCs/BHUs. Staff members from municipal health centres will be included

in the training plan. The proposed cadre of CHWs will be trained in ARI along with their supervisors and medical officers of referral health centres.

60. **Malaria Control Programme:** Historically malaria has been a major public health problem of Pakistan and it will continue to pose a potential threat to the health of people for years to come because of socio-economic condition and changing epidemiological patterns in the country.

61. The overall objective of the programme is to keep malaria under effective control so that it does not become a public health problem in the country. The strategy during Eighth Plan would aim at containing the incidence of malaria through use of insecticides and improved case detection and treatment at all health out-lets.

62. The specific objectives are listed as under:

To keep malaria to a level of 0.5 cases/1000 population and to reduce this further in both rural and urban areas of Pakistan.

To progressively reduce reliance on the use of insecticides and simultaneously promote alternative methods of malaria control such as environmental management, biological control. This activity will be undertaken by the National Malaria Institute of Training and Research, Lahore.

To carry forward the functional integration of malaria control programme with general health services.

63. The following control methodology will be applied:-

- Selective indoor residual insecticidal spray against mosquito vectors on epidemiological considerations.
- Case detection through house to house search and through health out-lets in both rural and urban areas.
- Treatment of cases.
- Health education.

64. **Tuberculosis Control Programme:** The number of open cases of tuberculosis is estimated at 0.12 million. As in all infectious diseases each individual with the disease constitutes a portion of the reservoir of disease in the community and the reservoir in turn determines new infectious and prevalence rates for the community. Thus in the case of tuberculosis one patient (open case) can infect upto ten persons.

65. Though the disease is on decline, the age specific prevalence of tuberculosis shows that over 80 percent of cases occur in individuals in their most productive years of life leading to a disproportionate effect on economic and social conditions.

66. The epidemiological picture according to surveys conducted by National T.B. Control Programme of the disease in the country is as follows:

	(Percent)		
	1961-62	1974-78	1987-88
Infection rate	23.0	13.0	7.70
X-Ray positivity rate	4.6	1.9	
Sputum positivity rate	N.A.	0.3	0.17

67. Approach for TB Control during the Eighth Plan will be by means of case finding and early treatment to render the individual non-infectious and to reduce the reservoir of the disease in the community. Case finding does not always require sophisticated diagnostic tools. In the case of tuberculosis microscope is more important than an X-Ray machine, because the danger to the community is greater from those individuals who are excreting the bacilli in their sputa.

68. If full diagnostic potential of the BHU could be realized, then with improved case finding and treatment and adequate B.C.G. immunization of the susceptible in the community; it is estimated that the number of open case can at least be halved during the Eighth Plan period.

69. *Acquired Immune Deficiency Syndrome (AIDS)*: The World Health Organization estimates that at present there are 09-11 million adult HIV infected carries and 1 million HIV infected children throughout the world. The number of AIDS cases is around 1.5 million, which includes 500,000 AIDS cases in children.

70. By year 2000, WHO projections suggest there will be 30-40 million HIV infected with 6-10 million AIDS cases. WHO estimates that the number of HIV infected will at best triple and at worst quadruple in just 8 years time. Ninety (90) percent of infection will be in developing world.

71. The main thrust in the prevention and control of AIDS during the Eighth Plan will be on awareness and education i.e:

- Safe sex;
- Proper screening of blood for HIV infection at all blood transfusion centres;
- Use of disposable/properly sterilized syringes; and
- Extensive health education campaign.

72. **Family Planning:** The present contraceptive prevalence rate is estimated to be too low to have any appreciable effects. There is presently no evidence of any appreciable decline in fertility rates. In order to increase service provision and promote usage of contraceptives, the new scheme (vide infra) for concerted efforts by the Health and Population Welfare Departments will be pursued during the Eighth Plan.

73. The health departments have a large facility network at their disposal. All these facilities will be actively engaged in family planning activities. The entire health manpower will be trained in contraceptive technology by the Ministry of Population Welfare and Population Welfare Departments. For active collaboration of health and population welfare departments, district committees will be set up in all the provinces. These committees will monitor the training of health personnel in family planning and delivery of family planning services. TBAs, and CHWs will also be involved for interpersonal motivation and contraceptive delivery. An extensive IEC campaign will be conducted to acquaint the public with the new system of service provision.

Management Issues

74. **Health Information System (HIMS):** The improvement of existing HIS is one of the major national strategies for the development of PHC based service delivery systems. HIS, during the Eighth Plan would aim at restructuring the health information by replacing existing routine reporting system in all government management first level care facilities by a comprehensive and integrated health management information system.

75. Priority will be given to first level care facilities because they are the principal level for the delivery of PHC. The Ministry of Health (MOH) in consultation with the provincial health departments have already chosen indicators for the first level facilities, defined data collection procedures, information flows and data processing mechanism. These have been field tested. A nation-wide training programme is already in progress. As soon as health personnel of a district are trained, use of outdated registers and forms will be discontinued and new system will be introduced.

76. Data processing for the new system will be computerized at appropriate levels in the health system and supervisors at all levels will receive training in the use of information for better planning and management of health services - specifically of maternal and child health.

77. A simple HIMS for the hospital sector will also be designed, tested and implemented to give decision makers adequate information on which to base their action.

78. **Hospital Management:** In 1993, Pakistan has over 75,000 hospital beds, including the private sector. An average population/facility ratio of 1,600 people per bed, is low, even for a low income country.

79. There are large variations in the utilization of hospital services. Tertiary and large urban hospitals tend to be better utilized than secondary and smaller institutions. This appears to be associated with better availability of equipment and trained staff at the tertiary level.

80. At present there are no quality control mechanisms in place within the hospital sector. As a result, the public hospitals are generally perceived to be of low quality, which is one of the reasons that the general public tends to seek care at higher, and therefore more costly, levels of care.

81. All public sector hospitals are funded from general revenues of the government. Among the 22 teaching hospitals, 3 have been granted a (semi) autonomous status. In this case, funding is provided by the government as a lump-sum "Grant-in-Aid".

82. In addition to the funds received from government sources, public hospitals receive funds from two other sources; users fees and Zakat. The user charge is nominal: Rs.1 per outpatient visit and Rs.5 per inpatient day in one province. The revenue generated from these charges is minimal (estimated as 4.6 percent of expenditure in 1986/87). Furthermore, the revenue from user charges does not remain in the hospital. The funds are returned to the treasury for general reallocation.

83. The entitlement programme for government employees and their dependents puts an additional strain on hospital resources. Under this programme, employees and their dependents are allowed to receive free care from any public institution. Since the hospitals do not receive a direct reimbursement, such care represents a drain on their already scarce resources.

84. During Eighth Plan it is envisaged that:

- Any addition of new beds would be selective and linked to teaching rather than service delivery.
- Teaching Hospitals and Divisional Hospitals would be granted an autonomous status and be allowed to establish their own schedule of users fees;
- All hospitals be allowed to retain the fees collected and to disburse them along agreed upon priorities, established by the Federal/Provincial governments and the Hospital Board of Governors;
- A priority programme to train hospital administrators in management techniques be developed and implemented;
- A management information system be planned and designed by the Ministry of Health in collaboration with the Provincial Health Department and implemented by the hospitals;
- The Federal Ministry of Health and Provincial Health Departments would draft criteria and guidelines for enhancing the quality of care in hospitals and make their grants conditional;
- Continuing education should become a condition for continuing employment;

- Improve the integration of the health system from BHU to tertiary hospitals and set up filter clinics to manage the referrals between first levels of care and hospitals.

85. The Health Manpower Planning in Pakistan has generally remained inadequate. The sudden spate of the graduate doctors caused by their stepped-up production in the seventies without a preceding or even concomitant development of public-sector health facilities or the private-sector's absorption capacity to commensurate levels and without any pre-conceived plans for the effective utilization of the excess outputs well exemplifies the haphazard and ad-hoc nature of Planning. The parallel development of supportive categories of nurses and paramedics was not accomplished thereby incapacitating the proper functioning of health sector. The onward career-development of medical graduates as medical specialists also remained choked because of the few specialist training opportunities and facilities. The gross shortage of specialists due to their inadequate outputs, exacerbated further by their emigration, undermined the development of a well-integrated referral system at the tertiary and specialized care levels. Shortage of specialists also restrained the development of the teaching faculty at graduate and post-graduate Institutions and prevented the aggregation of a "critical mass" of highly trained health professionals to promote Inter-active learning and continued reciprocal reinforcement of motivation due to sharing of experience.

86. The Eighth Plan recommends that although keeping in view the population growth rates, the health manpower in aggregate needs to be doubled over the next ten years, the output of medical graduates has to be stepped down, while the training of medical specialists, medical technicians and LHVs has to be spurred in order to cope with the Year 2000's estimated need. A similar acceleration of the production of dentists and pharmacists is also recommended. However, different provinces have to adjust to their respective needs.

87. The deployment of health manpower at peripheral facilities for a more-accessible health care has hitherto remained a priority. Some incentives have been given for the rural service while upgrading of rural facilities as envisaged in the Eighth Plan alongwith the concomitant development of the social-services infrastructure will further attract doctors and paramedics. However, the bypass phenomenon, compels the local consumers to travel large distances for obtaining more medical care. Primary care facilities would mount as a managerial problems with increasing mobility and transport facilities. This could be forestalled with the enforcement of a strict referral system. Hence it would become absolutely necessary to attract both the health providers and the consumers, that the peripheral facilities be of sufficiently high standards to take care of the most commonly needed medical and surgical services. Since provision of separate specialists at such an extensive constellation of rural facilities is not possible, the doctors posted there would need to be proficient to take care of a broad-spectrum of care. This would mean training skilled "Family Practice" physicians. The upgrading of these facilities therefore has to be considerable before they become an acceptable option for the family physician to man them and for the patients to drop "bypass" as their first choice.

88. Some of the proposed measures contemplated during the Eighth Plan are:

- Health manpower planning will be institutionalized at the federal and provincial level by establishing Human Resource Development Units.
- The shortage of nurses and enhancement of their status will be overcome by better pay scales and better recognition. There is need for recognition of certain categories of nurses by the Nursing Council i.e. nurse assistant, community nurse, nurse auxiliary etc. Development of a sound career structure would, besides improvement in efficiency, discourage migration of this scarce commodity to other countries.
- A cadre of Family Physicians (as mentioned above) will be developed and given recognition as a specialty/discipline.
- College of Community Medicine and Health Services Academy, will be strengthened and updated.
- A firm political resolve will be summoned to give necessary thrust for implementing radical manpower decisions. Thus a cut in medical school seats might provoke public protest.
- A career structure for all categories of health manpower will be developed in consultation with relevant agencies.

89. The number of existing training institutes, their current annual output and the projected future requirements (annual demand) are given at Statistical Appendix Table-III-10.2.

90. **Organization and Management:** The Ministry of Health and the provincial departments of health will undertake a process of planned continuous organizational development. This will be a priority of the top management as it will be the mechanism by which services will be improved. The organizational development effort will be at all levels: federal, provincial, district and institutional. The efforts will be aimed at increasing the system's effectiveness as measured by changes in the public's health status. The organizational development will aim at decentralization of managerial systems and decision making authorities.

91. Some of the specific activities to be carried out during the Eighth Plan are given below:

- Provincial, Divisional and District Health Development Centres will be established for improvement of management and inservices training of all categories of health manpower with focus on management of PHC.
- Human Resource Development Units will be established in all provinces to continuously monitor the health manpower training programmes and update the data on available manpower.

- Strengthening of Planning capabilities at Ministry of Health and Provincial Health Departments.

92. Strategy for implementation will be developed in accordance with the guidelines contained in the chapter for Social Action Programme.

Landmarks of Eighth Plan

93. The main achievements include:

1. Upgradation of basic health units and rural health centres, better equipment, more medicines, facilities for indoor treatment. Staffing levels and utilization would be significantly improved.
2. Induction of 33000 Female village health workers, mostly at the village level.
3. Rationalization of policy regarding supply and pricing of drugs.
4. Coverage of preventive services extended to 90%.
5. Decisions 'shift to health education'.
6. Removal of manpowers imbalances - particularly the shortage of nurses, para medics, and pharmacists.
7. Upgradation of hospital management.
8. Provision of Rs. one billion for health programme in narcotics.

94. **Health Insurance:** Employee Social Security Institutions (ESSIs): ESSIs provide health insurance coverage to lower-income employees in the private sector. They are quasi-public, operate under government ordinances and are managed as autonomous organizations. Government regulations require that establishments of over 10 employees register any workers earning less than Rs.1,500 per month. More than 500,000 mostly urban employees are registered. Premiums are 7% of the salary, paid by the employer. The ESSIs provide various social benefits, of which the largest expenditure is medical care. ESSIs are well established and have a service network that could provide a base for a national system of health and social insurance covering a large segment of the population. Categories of potential additional enrollees include higher-wage industrial employees, lower-grade government employees, self-employed persons, indigent registered with the Zakat fund and employees in smaller corporate establishments (5 to 10 employees). If all these new initiatives are introduced, the ESSIs' coverage could be increased to cover 14-16 million people. These proposals need a detailed discussion for implementation.

95. **Health Insurance:** During the plan period, a pilot project will be started to introduce and implement the health insurance schemes in the organized urban areas like Islamabad, Karachi, Lahore and other large cities.

96. *User Charges:* The provision of free health care has historically been considered a right. However, patients entering the public hospital system are asked to pay a nominal fee of Rs.1 per outpatient visit and Rs.5 per inpatient day. The consultation, food, treatments received, medicines, and bed services are all provided at no cost to the ward patient. If a patient is willing to pay, private rooms are available in the public health facilities. Prices for private room services in public facilities tend to be significantly less than those in private hospital facilities. The revenue generated from user charges as admission fees and private room charges is minimal (2-5% of a hospital's budget). Furthermore, the revenue from user charges does not remain in the hospital. The funds are returned to the treasury for general reallocation. As the hospitals are not able to benefit from their collection, the incentive for hospitals staff to collect the fees is limited. It is proposed that:

- Systems of user charges be introduced with improvement in the quality of services;
- Deliberations are needed to charge consultation fee in outpatients and admissions fees per inpatient day and fees for procedures.
- Diagnostics tests, support services and private beds in the government hospital be charged at its full cost recovery.
- Hospitals be allowed to utilize the generated income for the requirements in hospitals and better services of the masses.

97. Physical target for the 8th Plan are given at Statistical Appendix Table-III-10.3. Financial allocations by executing agencies for SAP component are at Statistical Appendix Table-III-10.4. The non SAP allocation for the Federal Programme excluding Special Areas has been kept at Rs.5.15 billion. This includes an amount of Rs.1.0 billion for the health programme of "Narcotics and Psychotropic Drug" and Rs. 952 million for nutrition programmes. The major non SAP programmes of the Health Division are given at Statistical Appendix Table-III-10.5. The expected change in the Health Indices by the end of the Plan Period is given at Statistical Appendix Table-III-10.6.

98. *Private Sector:* Private health sector accounts for nearly two-thirds of all health expenditures. Private sector facilities are largely urban and curative, and of varying quality. High levels of expenditure are not commensurate with improvements in health. This is because of limitations of the private sector in solving environmental health problems and breaking the vicious cycle of communicable, infectious and parasitic diseases.

93. The private sector provides health cover to around 70 percent of the population, mostly for the treatment of common ailments, secondary care and limited tertiary care. The role of the private sector in preventive and promotive services is limited:

99. The private sector consists of:

- General practitioners (GPs) operating through office based practice. There are more than 20,000 of these "clinics", accounting for over 90 percent private sector service points;
- About 520 small to medium hospitals that have a total of over 16,000 beds; More than 300 maternal and child health (MCH) centres with 2-3 rooms, also known as maternity homes;
- Nearly 340 dispensaries; these are outpatient primary health care (PHC) facilities; and
- Over 450 small to medium diagnostic laboratories.

100. Non-profit institutions are run by ethnic and religious communities, or philanthropic associations and foundations. The non-profit sub-sector is mostly restricted to urban areas, but also provides some PHC services in rural areas. Since 1985 The Small Business Finance Corporations (SBFC) is providing assistance to unemployed doctors with a loan upto Rs.75,000. For hospitals, the upper limit is Rs.1.5 million (raised to Rs.2.00 million in FY 1992).

101. The public sector spends 15-20 percent of its investment budget in big cities on teaching and specialized hospitals with ever-increasing recurrent expenditure liabilities. The Eighth Plan strategy will be that further investment in tertiary care facilities by the public sector be selective. This would create a favorable environment for private sector's investment in big cities. Publicizing the presently available package of incentives as a first step can be a reasonable starting point for facilitating the expansion of the private health sector and gradual shifting of the tertiary care to the private sector.

102. **Traditional Medicine:** The total number of tabibs, homeopaths and viads practicing within country is as follows:

Tabibs	36,488
Homeopaths	21,341
Vaids	537
Total:	58,366

103. Number of Government recognized colleges to impart education in tibb are 18 and 40 in homeopathy. No college has its own building. All are functioning in rented buildings. None of these have outdoor/indoor facility for teaching except three homeopathic colleges. There is no regular budget for these institutions. They receive grant-in-aid from the Government which is Rs.0.9 million for tibbi institutions and Rs.1.00 million for homeopathy institutions.

104. Pakistan is sufficiently rich in herbs. At least five hundred kinds of herbs have already been identified out of which two hundred are currently employed in tibbi treatment in the country. There are about 10 leading manufacturers of tibbi medicines who are processing wide range of products on commercial scale with a sizeable annual turn-over. They are equipped with some modern equipment. Besides these manufacturers drugs are being formulated by individual practitioners for their own use and these drugs run into thousands.

105. As regards the homeopathic drugs, about 25-30 percent of the mother tinctures are manufactured but all the patent and proprietary drugs are presently being imported.

106. Specific measures to promote traditional medicine during Eighth Plan are as follows:-

- Development of traditional system of medicine within its own fundamental principles.
- The establishment of discipline of Medicinal Botany at the Traditional Medicine and Drug Research Centre at National Institute of Health.

107. An amount of Rs.100 million will be provided under preventive programme, besides allocation of Rs.3198 million for various medical and health institutions under the Health Division.

NUTRITION

Goals

108. Improving nutrition of the people should be seen as an objective of development planning in its own right; and a whole range of sectoral policies and programmes need to be drawn. For this a systematic approach is needed on the nutritional and income distribution implications of food production and supply policies, food distribution policy and public health policy. Keeping these objectives in view there is a great need for realistic and implementable multi-disciplinary food and nutrition policy. Without this multisectoral approach the activities carried out directly with the people to promote better nutrition and to prevent and cure malnutrition should be considered as one of the important responsibilities of the health sector.

109. Any lasting changes in the nutritional status of population must be affected by combination of nutritional and non-nutritional measures. Nutrition therapy will only help sick, hospitalized children, and nutrition education might, in the long run, have some effect on food choice. Hence effective nutrition action is dependent upon availability, price and presentation of food and upon improving the health of the population, so that people will be able to utilize food most effectively. Without the support of economic, social and health programmes, isolated nutrition measures can have only a temporary effect.

110. The factors that determine the nutritional problems in Pakistan show different weightings in the diverse social, economic and ecological conditions that occur in the country. In infants and pre-school children, these factors mostly relate to combinations of inadequate knowledge on good weaning practices, recurrent episodes of diarrhoea and respiratory infections, and the continuous threat posed by an unhygienic environment, with the sheer insufficiency of food availability playing a lesser role. However, in slum areas of urban agglomerations, a decline in breastfeeding coupled to bottle feeding and an insufficient food supply due to unemployment and poverty are added factors. In women of child bearing age a diet that is insufficient to meet the great demands of closely spaced pregnancy and prolonged lactation are a threat both to her own nutritional status as well as that of her offspring. In this particular group, poverty and low availability of food at the household level are the principal determinant factors. In certain areas of the north, high rates of iodine deficiency disorders completely overshadow all other nutritional problems that the local population might suffer.

111. For the multi-disciplinary nature of the nutritional problems, the technical basis for action within each sector and inter-sectoral level are well known. Strategies are needed to develop national capacity to apply this technical knowledge in situation of adverse economic conditions.

112. Nutritional actions generally entail low cost programmes for prevention of illness and mortality. However, actions on many fronts are needed, as nutrition is multi-sectoral in nature. The objective is to provide better nutrition during changed physiological conditions with simultaneous development of economy and resources, not ignoring the participatory and distributional aspects, and nutrition education through multi-media.

113. The main crucial issues to be addressed in 8th Five Year Plan to achieve plan objectives and targets are:

1. Poverty Alleviation.
2. Capacity and capability to address nutrition issues at various levels.
3. Control of Infectious Diseases.
4. Mass Awareness regarding improved nutritional practices especially of vulnerable groups.
5. Eradication of specific diseases of nutritional origin, e.g. Iron Deficiency Anaemia, Iodine Deficiency Disorders etc.
6. Inclusion of element of nutrition in all development programmes of the related sectors.

Objectives

114. The objectives of the 8th Plan are:

- To prevent malnutrition in the preschoolers.
- To reduce anaemia in pregnant and lactating mothers, preschoolers and children of all ages.
- To reduce prevalence of low birth weight.
- To significantly reduce occurrence of new cases of goitre in areas where it is pandemic and reduce its prevalence in preschoolers and teenagers.
- To generate mass awareness about the appropriate nutritional practices.
- To reduce 3rd degree malnutrition.
- To universalize iodised salt.

Policy Perspective

- i) Institutionalize nutrition as a discipline by creating a proper infrastructure for the implementation, monitoring and evaluation of nutrition programmes.
- ii) Develop capacity to deal with food and nutrition problems at federal, provincial and district level, through human resources development by establishing trained manpower in sectors like health, agriculture, education etc.

- iii) Develop strong linkages of nutrition programmes with other disciplines such as agriculture, education and rural development.
- iv) Integrate nutrition related activities in the health network through primary health care and family welfare centres e.g. (a) distribution of certain nutrients, iron sulphate; (b) nutrition surveillance system; and (c) nutrition education/food demonstration.
- v) To systematically incorporate knowledge of food and nutrition in information and education programmes.
- vi) To enhance awareness of national nutritional problems and healthy nutritional practices in professional education, public policy forums, non-governmental bodies, and provincial and local officials.
- vii) To monitor policy inputs, operations and impacts.
- viii) Fortify various products e.g. salt with iodine.

Management Issues

115. **Private Sector:** The management of existing programmes which are mostly in the public sector is poor. In order to improve the situation private sector involvement will be activated. Private sector has been included to involve in the manufacture and marketing of iodised salt. As a result of increasing demand for iodised salt, the private sector has been encouraged to manufacture iodised salt. An extensive promotional campaign, incentives to provide free potassium iodate, necessary technical assistance quality control and enforcement of legislation to ban sale of non-iodised salt will further boost iodised salt production and marketing of salt in the private sector. A detailed plan of action for effective involvement of private sector is at the anvil. A plan for social marketing for micro-nutrient e.g. iodised salt and Ferrous Sulphate will be drawn and executed to boost private sector involvement.;

116. **Improved Coordination with NGO's:** There is no national NGO for extending nutrition activities. Only few NGOs are delivering limited nutritional and health services.

117. A Nutrition Foundation will be set up to extend nutrition services and coordinate the activities of existing NGO's and involve new NGO's and set up Women coops in the villages to deliver nutrition services. Local government/Municipal Corporations of big cities will also be involved extensively in the delivery of nutrition services..

118. **Decentralization:** In the public sector implementation of projects the allocation of inputs and facilities would be decentralized at provincial and district level to develop capacity and gain efficiency.

119. Following steps shall be taken to enforce plans discipline and implementation:

- Institutionalize the system e.g. establishment of plan implementation units.
- Establishment and strengthening the supervising and monitoring system.
- Allocation of funds according to sponsor's needs.

Consolidation and Rehabilitation

120. The following measures will be undertaken to create suitable environment for production and utilization of proper inputs and services:

- i) A detailed plan of action for activating private sector investment in production and marketing of iodised salt will be chalked out on cost effective basis.
- ii) Legislations for (a) banning the use of non-iodised edible salt through legislations (b) regulation on manufacture and marketing of breast milk substitutes will be formulated and enacted.
- iii) Mass awareness campaign will be launched regarding national nutrition problems and healthy nutritional practices and knowledge of food and nutrition will be incorporated in the information and education programmes.
- iv) An effective system will be established to check adulteration to improve food quality control. An inter-ministerial National Council of Food Quality Control under Chairmanship of Minister for Health has already been instituted for the purpose.

Landmarks of the Eighth Plan

121. As a result of implementation of 8th Plan policies and programmes following major achievements are expected:

- i) Infrastructure in various departments in provinces and federal agencies and the private sector would be established with a capacity and capability to address nutritional issues at various levels.
- ii) Protein - Calories malnutrition (moderate to severe) in children under 5 years would be reduced from 39% to 20 percent, and incidence of Low Birth weight babies from 25 to 15%.

- iii) Iodised salt would be made available entire population. This would reduce overall prevalence of goitre and eventually eliminate iodine deficiencies disorders.
- iv) Anaemia would be reduced from 45 to 20 percent in pregnant and lactating women and from 65 to 30 percent in children under five through fortification and iron supplementation.

Targets and Allocations

122. Nutritional targets set for the 8th Plan are given in Statistical Appendix Table-III-10.7.
123. To achieve objectives of the 8th Plan nutrition projects under SAP and other programmes will be implemented.

1. Social Action Programme (SAP)

124. The Social Action Plan (Statistical Appendix Table-III-10.8) has a strong component of Nutrition which emphasises on nutrition alleviation. SAP includes following programmes:

125. *Nutrition in Primary Health Care:* The basic concept of the primary health care system in Pakistan is to enhance preventive and promotive health care system. The nutrition services through 5,000 primary health care centres would include: (i) establishment of nutrition clinics at rural health centres and basic health units; (ii) nutrition surveillance system for early detection of malnutrition through growth monitoring and promotion; and (iii) food demonstration for improved feeding, weaning and supplementary feeding of children and mothers.

126. *School feeding Programme:* The linkages between school performance and dropout etc. and nutrition are well established. The school going children are not enjoying satisfactory nutritional status. Their endurance to sit in the class and participation and attendance in the school and the number of days, they remain out of school for being unwell are some of the factors responsible for high dropout rate. Therefore, school feeding programme will not only improve the nutritional situation but will also act as an incentive for the children to come to schools. Because of lack of resources the programme will start initially for the girls students covering about 2.8 million students throughout the country.

Nutrition Intervention Programme for Combating Diseases of Nutrition Origin

127. Micronutrient deficiency such as iodine, iron and vit.A are severely affecting a sizeable segment of population particularly the vulnerable groups and the population living in the endemic areas. To control IDD a three pronged strategy of salt iodization, iodised oil capsules and injections has been launched to eradicate the problem.

128. Legislation to iodize all the edible is under process for approval of the assemblies.

129. Iron deficiency anaemia of nutrition origin is a major public health problem affecting vulnerable groups especially. Distribution of iron sulphate through primary health care network coupled with proper nutrition education will be launched to control anaemia. Vit.A deficiency control would be taken on case to case basis to cover one million population.

Support to NGO's Programmes and municipal Corporation of big Cities for Health and Nutrition

130. The NGO's and Medical Directorates of Municipal Corporations of big cities are playing a very significant role in the social sector including, health, education and nutrition etc. It has been observed that they work more effectively and efficiently with the community where public sector programmes usually are not very successful. They will be given the responsibility of growth promotion, anaemia control and dissemination of nutrition education.

2. Other Programmes

World Bank's Assisted Pakistan Nutrition Project (US \$ 80 million): The project is likely to be launched in 1995 to strengthen efforts of the government to ameliorate the nutritional status of population in general and vulnerable groups in particular.

Nutrition Policy Planning, Coordination and Support Programme: Under which existing infrastructure for nutrition planning will be strengthened and made more functional in the provinces.

World Food Programme: Food commodities will be supplied to vulnerable population visiting health facilities. This will enable to help them impart nutrition education and introduce growth monitoring, to improve their nutritional status.

Mass Nutrition Awareness Programmes: A multi-media campaign will be launched to change the defective nutritional practices.

Food Adulteration/Food Quality Control Programme: This programme has been envisaged in pursuance of P.M.'s directive which urged that adulteration should be strictly controlled and food quality control be improved. A high power inter-ministerial National Council on Food Quality Control is constituted under the Chairmanship of Minister of Health. The programme for establishment of food testing laboratories alongwith training programme will be phased out so that each district has laboratory by the year 2000. Besides, one reference laboratory at federal and one at each provincial headquarter will be established to back up the field laboratories, at district level.

Plan Allocation

131. Estimated outlay for Nutrition Programmes for 8th Plan under SAP is Rs 3860 million and Non-SAP is Rs 952 million.

III-11**POPULATION WELFARE****Introduction**

Pakistan since inception is experiencing a high rate of population growth. Today it ranks 8th in terms of population and 34th in the world in terms of geographic area. Lowering of the population growth rate is one of the primary objectives of 8th Plan.

2. The population welfare efforts were initiated in mid fifties by a national level NGO "the Family Planning Association of Pakistan". There-after the Government started institutionalized efforts for population planning. The main objective of Population Welfare Programme is to reduce the level of fertility by motivating people for child spacing and for a small family norm.

3. At the time of first census in 1951, Pakistan (West Pakistan) had a total population of 33.74 million. By mid 1993 the population had reached 122.7 million increasing at an average growth rate of 3.1 percent per annum. For 1992-93 the incremental growth rate is estimated at 2.9 percent. The rapid increase reflects a decrease in death rate, low literacy, low female labour force participation rate and low status of women.

Policy and Programme in Eighth Plan

4. The main thrust remains the expansion of family planning services by creation of infrastructure in the rural area. This would be supported by a motivational campaign.

Population Welfare Policy:

5. In the past, political and administrative support has been fluctuating. Recognizing the consequences of the rapid growth of population for social and economic development, the government has resolved to provide a strong support to the programme. The object is to reduce growth rate from 2.9 per cent (1992-93) to 2.7 per cent per annum by 1997-98 and 2.6 per cent by 2000.

6. During the Eighth Plan, family planning coverage will be expanded to over 70 per cent of the rural and 100 per cent of the urban population. For the rural areas, a new infrastructure comprising a network of village based family planning workers, trainers and supervisors would be created. This would take the services to the doorsteps of the people. The programme would be implemented with the active involvement of the community.

7. During the Sixth and Seventh Plans multi-sectoral approach was initiated as a measure to expand the population coverage. On the basis of the same, for the Eighth Plan active participation has been mandated for federal and provincial Ministries, Departments of Health and all line departments to provide family planning services thorough their service outlets. Health Sector will provide support to population welfare programme by recruiting 33000 village health

workers who will provide primary health care and family planning services in the rural areas. Private medical practitioners are also being involved in the provision of family planning services. In other words, the number of outlets is being maximized.

8. An Inter-Ministerial Committee has been set up for effective implementation of Population Welfare Programme. This Committee consists of Ministers for Planning and Development (as Chairman), Education, Health, Information and Population Welfare. Similar, committees have been set up at provincial levels to monitor the progress of the programme.

9. For reviewing the programme and providing policy directions Population Welfare Councils have been created at the federal and provincial levels and committees at the district levels.

10. The motivational component is being further strengthened by upgrading the IEC campaign and placing greater emphasis on the inter-personal communication reinforced by the electronic media.

Objectives

11. The overall objectives of the 8th Plan are:-

- i) To raise the level of use rate from an estimated 14.0 percent in 1992-93 to 24.4 percent by the end of 1997-98;
- ii) to reduce the total fertility rate (TFR) from 5.9 in 1992-93 to 5.4 by the end of June, 1998;
- iii) to reduce the crude birth rate (CBR) from 39 (1992-93) to 36 by the end of 8th Plan period; and
- iv) to prevent 4.661 million births by serving 20.906 million acceptors and to reduce the rate of population growth from 2.9 percent (1992-93) to 2.7 percent by 1997-98.

12. The year-wise quantitative targets appear in Table-11.1.

Table-11.1

Targets of Selected Demographic Indicators, 1993-98

	1992-93 (Bench Mark)	1993-94	1994-95	1995-96	1996-97	1997-98
-Crude Birth Rate (Per thousand population)	38.99	38.44	37.96	37.36	36.74	36.00
-Crude Death Rate (Per thousand population)	10.00	9.83	9.65	9.45	9.23	9.01
-Rate of Natural Increase (percent)	2.90	2.87	2.83	2.79	2.75	2.70
-Rate of Growth (percent)	2.95	2.91	2.86	2.81	2.77	2.74
-Total Estimated Population (Million)	120.923	124.440	128.009	131.635	135.305	139.024
-Estimated Number of Married Women-Age Group 15-49 years (Million)	19.363	19.895	20.458	21.053	21.688	22.361
-Contraceptive Prevalence Rate	14.00	15.50	17.35	19.45	21.75	24.42
-Number of Birth Preventions including carry-over effect (Million)	0.593	0.682	0.786	0.912	1.058	1.223
-Number of Acceptors including carry-over effect (Million)	2.711	3.084	3.549	4.095	4.717	5.461

Source: Ministry of Population Welfare and Planning & Development Division.

Strategy

13. The major problems faced in the programme in the past have been the inadequate coverage of population and poor performance in the field, in particular in the rural settings. The main focus of the strategy in the programme of the Eighth Five Year Plan is to expand the programme coverage of population from 20 percent to over 80 per cent and to improve the efficiency of the implementation. This will be achieved by increasing the present urban coverage of 54 per cent to 100 per cent and rural coverage from 5 per cent to over 70 per cent. The programme will be extended to the entire population by the year 2000.

Urban Strategy

- The number of Family Welfare Centres in the urban areas will be increased from 690 to 900; the new centres will be established in Katchi Abadis, slum areas and areas of low income concentration. The low performing existing centres would be relocated to the areas of large demand.
- The number of Reproductive Health Centres 'A' type will be increased from the existing 79 to 104 which would cover all district headquarters and selected tehsils. The new centres will be established at the remaining district hospitals, which were not covered in the Seventh Five Year Plan and in selected tehsils where necessary support would be available.
- The number of Reproductive Health Centres 'B' type, will be increased by enlisting all the district and municipal and town committees and TGI hospitals, remaining tehsil hospitals and private hospitals where operation theaters and related facilities are available.
- The number of health service outlets operating in Target Group Institutions (TGIs) such as Railway, PIA, Defence Services, KPT, Steel Mill, Fauji Foundation, Agricultural Development Bank and other similar institutions will be increased from the present 174 to 450 in the Eighth Plan.
- All health outlets operating under the departments of Health, Local Government and Rural Development, Labour, Social Welfare and Inspectorate General of Frontier Constabulary located in the urban vicinity would be effectively involved in dispensation of family planning services. The medical and para-medical staff will be provided training/orientation and refresher courses in family planning techniques alongwith necessary equipment, IEC material and regular supply of contraceptives. The village health workers will also be involved in the inter-personal motivation and service delivery in the rural areas. They will be imparted training in dispensation of family planning services.
- The involvement of NGOs in the programme will be strengthened through training, technical assistance and selected operational inputs to improve service delivery, particularly in urban slums, katchi abadis and labour colonies.
- All registered medical practitioners operating in the urban areas will be effectively involved to provide clinical and non-clinical methods depending on the facilities available with them.
- Hakeems and homeopaths will be involved in clinical and non-clinical methods and as catalysts for motivational role.
- The Social Marketing of Contraceptives will be expanded during the 8th Plan to include distribution of oral pills, injectables and IUD's besides condoms.

Conventional contraceptives would be made available at all chemist shops, grocery and other shops. The Registered Medical Practitioners, Homeopaths, Hakeems and Traditional Birth Attendants would be provided with conventional and non-conventional contraceptives, IEC material and training through this system.

Rural Strategy

14. There are 45000 villages in the rural setting with a population of 85 million. Out of these, 13060 villages have a population of 2000 or more and account for 70 per cent of rural population. The strategic measures include:-

- The efficacy of the existing 606 Family Welfare Centres which cover 5 per cent of the rural population will be improved by relocation, as necessary.
- The coverage will be increased further by effective involvement of operational rural health centres, Reproductive Health Centres, Mother Child Health Centres and Basic Health Units.
- The existing 130 Mobile Service Units located in tehsils will be increased to 251 to provide services to remote areas.
- The number of existing Traditional Birth Attendants will be increased from 5000 to 7000. They will provide motivation as well as conventional contraceptives and refer cases for clinical methods. They will also serve as auxiliary staff to Mobile Service Units and Rural Health Centres.
- An innovative strategy adopted in the rural areas is to introduce a community-based motivator-cum-service provider in villages with population of 1000 and above. In every village one suitable educated married women of over 18 to 50 years of age who is permanent resident of the village would be selected, trained and engaged on contract basis. This scheme was implemented in 1561 villages, on a pilot basis in the Seventh Plan and will be expanded to 12000 villages covering 60-70 per cent of the rural population.

Improving Information, Education and Communications Component

- Improvement of inter-personal communication in scope and quality is being emphasized through a well-developed scheme for encouraging interpersonal communication, outreach and follow-up by adequately trained workers.
- Information on the impact of birth spacing on infant, child and maternal mortality will be disseminated widely through the IEC component.
- Electronic communication media such as radio and television will play an increasing role in disseminating appropriate family planning information.

- All service outlets, private or public in urban and rural areas will display family planning sign-boards to indicate availability of services.
- Target specific messages would be developed with focus on young couples, which would be conveyed through all channels of communication of the IEC component.

Management

A - Structure

i) **Federal Set-up:** The funding of the programme is the responsibility of Federal Government. The federal functions include policy, planning, target setting, training, co-ordination, negotiations for foreign assistance and fulfilling related obligations; monitoring, research and evaluation; information, education and communication; service statistics; procurement, warehousing and distribution of contraceptives/commodities; Population Welfare Services through the non-governmental organization; target group institutions, and the programme of federal district of Islamabad. In addition, Ministry of Population Welfare extends family planning services to Azad Jammu and Kashmir and Northern Areas.

ii) **Provincial Set-up:** In all the four provinces there are independent Population Welfare Departments headed by Secretaries who assist the Federal Government in the formulation of overall policy, goals, targets and strategy. They are responsible for all operational planning, implementation, monitoring and co-ordination of population welfare activities in the provinces. During the Eighth Plan period monitoring, IEC and service delivery capacity of the provinces would be strengthened to meet the expanded requirement of the programme.

In the provinces the Divisional, District and Tehsil tiers serve as focal points and liaise with other line departments and NGOs for coordination of family planning services in their respective jurisdictions.

iii) **Political and Administrative Support:** The entire programme would be supported by broad based political and administrative support consisting of National Population Welfare Council headed by the Prime Minister at the Federal level, Provincial Population Welfare Councils headed by the Chief Ministers at the Provincial level and District/Municipal Corporation Population Welfare Committees headed by the Chairman District Council/Mayor Municipal Corporation.

In addition, Inter-Ministerial Committee headed by the Minister for Planning and Development with Ministers for Health, Education, Information and Population Welfare as members has been established at the federal level. Similar committees have been set up in the Provinces to review the programme and provide inter-sectoral support to the programme.

iv) **Service Delivery:** The measures proposed for reinforcing the service delivery network would include improving the efficiency of the existing network; adding new service outlets; and introducing the concept of community based family planning services at the village level.

The efficiency of the existing service delivery would be improved through refresher and in-service training, strict supervision, validation of performance, relocation of centres, and re-deployment of some of the staff. The Family Welfare Centres, Mobile Service Units, Reproductive Health Centres would be increased. The Health Outlets of the public and private sectors including the Non-Governmental Organizations, Traditional Birth Attendants, Registered Medical Practitioners, Hakeems/Homeopaths would be involved to the maximum with intensified system of review and monitoring. Various types of service delivery points involved in the programme are briefly described below:-

Family Welfare Centres(FWCs)

- The Family Welfare Centres have been the main service delivery network of the programme. The number of Family Welfare Centres will be increased from 1296 to 1518 in a phased manner during the Eighth Plan period. New centres will be established in katchi abadis and urban slums. Existing 606 centres will continue to serve the rural population.
- The Family Welfare Centres will provide a range of mother/child health services, family planning services and treatment of minor ailments to a population of five to seven thousand and would also enlist contraceptive distribution points for condoms and oral pills.

Reproductive Health Services Centres(RHCs)

- More emphasis would be placed on the contraceptive surgery and other clinical methods such as IUD and injectable for effective achievement of targets. The Reproductive Health Centres will provide a package of preventive treatment, obstetric/gynecology, child spacing, infertility treatment and contraceptive surgery services on a voluntary basis. The fee for contraceptive surgery which was fixed in 1985 will be increased suitably. The number of 'A' type Reproductive Health Service Centres would be increased from 79 to 104. These Centres will be located in all district headquarters and selected tehsil hospitals. The existing 13 extension teams would be merged in selected centres for undertaking extension work on regular basis.

Each Reproductive Health Service 'A' Centre will be headed by a lady doctor with its own operating facilities, provision of medicines, fully furnished office and transport. Provision for the construction/renovation of new centres within the hospital premises will be made.

- For ensuring standardized and safe contraceptive surgery two 'A' type Reproductive Health Service Centres viz. one each at Lady Wellington Hospital Lahore and Jinnah Post Medical Centre, Karachi having training facilities will be upgraded as Master Training Centres. These centres will be equipped with audio-visual and teaching aids and related staff. The

Centres together with 10 Reproductive health Training Centres will be responsible for developing training curricula and training methodology for training of the trainers. The 10 Training Centres will also coordinate and monitor Reproductive Health Service Centres on monthly basis for providing technical guidance and specialist support to facilitate smooth and efficient working of the component.

- The network of contraceptive surgery facilities would also be reinforced by enlisting service outlets of the non-governmental organizations, hospitals as 'B' type Reproductive Health Service Centres (not covered under 'A' Centres) with trained doctors having operation theater facilities. These units will be registered with the programme and provided with performance related reimbursement cost. The doctors so identified would be imparted training and provided with mini-lap kits.
- The Laparoscope Maintenance and Repair Centre will be maintained at Islamabad to provide backup facilities to all the service outlets of the reproductive health component.

Mobile Service Units(MSUs)

- To meet the increasing service needs particularly in rural areas, the outreach service facilities would be reinforced by increasing the number of the Mobile Service Units from 130 to 251 in a phased manner. These units would be established at Tehsil level to provide coverage to the villages through regular camping services and cover far-flung areas where no family planning facilities exists. These units will provide health and family planning services, ensure supervision, and impart on-the-job training to the Family Welfare Centres. The Traditional Birth Attendants involved in the programme will serve as contact points in the village for the camp services. They will also establish linkage with community based family planning workers.
- The staff of the Mobile Service Units will be reduced from 4 to 3 consisting of a lady doctor or a para-medic, a driver and an aya in order to make these units cost-effective. Each unit will be equipped with a vehicle and necessary supplies to meet all the operational requirements.

Community Based Service Delivery System in Rural Area

- The activity constitutes the major new input in the Eighth Plan. It is aimed at improving and strengthening the service delivery system in the rural area and is a departure from the past strategies. The scheme which has been tested during the Seventh Plan, envisages selection of 12000 local village based, educated and married family planning workers(FPWs).

These FPWs will serve villages having a population of 1000 and above. Each union council will have at least two FPWs. They would be given four months training for familiarizing with the basic health issues. The training will also include comprehensive courses in all family planning techniques (except IUD insertion and contraceptive surgery) as well as service delivery and motivational aspects. The training will be carried at tehsil level training centres.

- Each worker would be engaged on contract basis and paid a fixed amount of rupees one thousand per month as a retainer fee. She would also be provided medicines and stationery items worth Rs.200/- per month.
- These workers would establish service points at their houses, family planning display board would be installed at their houses. The workers will register eligible married women in household of respective village(s). They would visit the eligible women on regular basis for motivation, counselling and provide service delivery at their doorsteps and refer cases of surgery and IUD to the nearby Reproductive Health Service Centres or Family Welfare Centres. They would also be responsible for maintaining records of family planning acceptors and periodic reporting.
- To improve efficiency, continuity of contraceptive use and quality of service, these community based workers would be supervised through a well designed supervisory and monitoring system.

Non-Governmental Organization(NGOs)

- During the Eighth Plan increased allocation will be made for the NGO sector to strengthen and restructure with greater autonomy the institutional set-up, which at preset is in the form of Non-Governmental Organizations Coordinating Council(NGOCC). The NGOs will run cost-effective and efficient service network in the urban areas. They will also try innovative approaches. Training facilities in the country and abroad will be extended to NGOs to improve their manpower. Regular supply of contraceptives will be ensured for their service outlets. Combined public sector and NGO IEC programme will be developed and launched in order to benefit from each others expertise and specialization. NGOs having infrastructure in the rural areas will be accorded priority in the allocation of resources to establish family planning/health facilities in the rural areas. The NGOs programme will be reviewed regularly. It is expected that the NGO sector would be able to increase its service network from the existing level of 580 to 723 by the end of the Eighth Plan.

Social Marketing of Contraceptives(SMC)

- The Social Marketing of Contraceptives continued distribution of condoms through the commercial network since 1986. At present the distribution figure of SMC is about 60 million units per annum with concentration in urban and semi-urban areas.
- The scope of the component would be expanded during the 8th Five Year Plan. It is intended to supply oral pills and injectables to the Registered Medical Practitioners, Hakeems, Homeopaths, Traditional Birth Attendants, private hospitals and dispensaries through the Social Marketing of Contraceptives system. The component would develop its own target specific IEC material.
- The Ministry will provide support for promotional marketing i.e mass media, packaging, training etc. Dispensation charges to the implementing agency would also be minimized. The promotional activities to be carried out, will be regulated through an agreement between the Ministry and the Agency. The prices of the contraceptives sold through Social Marketing of Contraceptives will be regularly reviewed.

Provincial Line Departments Including Health Department

- During the Sixth and Seventh Plans the performance of these outlets was not satisfactory. During the Eighth Plan the involvement of health outlets of the Provincial Line Departments such as Health, Labour, Local Government & Rural Development, Social Welfare and Inspectorate General of Frontier Constabulary will be made more effective. The number of these outlets will be increased from 3168 to 7475. The outlets of the Provincial Health Departments where there is a female doctor or a para-medic would be identified. The staff would be given special training in family planning and provided with essential supply of equipment, IEC material and supply of contraceptives.
- Training/orientation will be provided at the Regional Training Institutes and Public Health Schools of the Health Department. This will be a regular feature of the component in order to maintain contact and obtain feedback about the impact of the initial input and reinforcement needed to make the outlets fully functional for family planning facilities.
- All identified outlets with trained staff will display family planning sign-boards outside the health unit. The mass media and all related IEC campaign will project the family planning service through this network.
- To ensure functioning of the component, joint progress review meetings at the federal and provincial levels and by the inter-ministerial committee

will be held as a regular feature. The District Technical Committees headed by District Health Officer with District Population Welfare Officer, Medical Superintendent and a representative of the Non-Governmental Organizations (where-ever present) as members, would be responsible to monitor the progress against given targets and co-ordinate the activities at the local level.

Target Group Institutions(TGIs)

- The Target Group Institutions, although represent potential source for extending family planning information and services, their performance in the past has been extremely low. During the Seventh Plan, 14 Target Group Institutions such as Defence Services, (Army, Air Force, Navy & CSD) Railway, PIA, KPT, Steel Mill, Fauji Foundation, Agricultural Development Bank, Post Office, T&T, WAPDA and POF Wah, with 174 health outlets have been involved in the programme to a varying degree.
- In the Eighth Plan it is proposed to extend the coverage to 450 outlets and associate additional Target Group Institutions which have large work-force. The input of the programme will include training/orientation, supply of equipment, IEC material and contraceptives. All the outlets will be required to display family planning sign-boards outside their hospitals/clinics. The Target Group Institutions would take full responsibility for services as well as motivational activities. The provincial and district offices of the programme would assist TGIs in this activity and provide local support for co-ordination, monitoring and logistics.

Involvement of the Traditional Birth Attendants(TBAs)

- The TBAs play an important role in the community particularly in the rural areas. The Traditional Birth Attendants would serve as village based contact for programme services, motivating couples, distributing conventional contraceptives and referring clients for clinical methods. They would work under Family Welfare Centres supervision, while maintaining close links with Mobile Service Units. Recognizing their importance the number of TBAs would be increased from 5000 to 7000 from the first year of the Eighth Plan.
- Each Traditional Birth Attendant will be recruited on a contract basis and paid a retainer fee of Rs.200/- per month, with additional Rs.25/- per month to meet the travel cost for visiting the centres for replenishment of contraceptives, referral of clients for clinical methods and to attend training/orientation courses.
- Each Traditional Birth Attendant will be provided with IEC material and

a sign board to be displayed at her residence to indicate availability of family planning services. Their performance would be monitored regularly by Family Welfare Centres and tehsil staff.

Registered Medical Practitioners(RMPs) and Private Hospitals

- During the Eighth Plan period all Registered Medical Practitioners numbering around 22500 and a large number of private hospitals will be associated in the delivery of family planning services.
- The Registered Medical Practitioners will be identified and enlisted with the private sector. They will be given one to three days orientation in family planning methods and will be provided with necessary reference material to be used by them in administering contraceptive services.
- The RMPs will be provided with injectables, IUD and conventional contraceptives. The conventional contraceptives will be provided through SMC system. Each Registered Medical Practitioner would be given a sign-board indicating availability of family planning services at his/her clinic. The doctors will charge fee from their patients for providing the family planning services and need not be given additional incentives.

Hakeems and Homoeopaths

- During the Eighth Plan, the performance of hakeems and homoeopaths for referrals and distribution of condoms, oral pills and injectables, will be improved. It is proposed to increase the involvement of hakeems and homeopaths in the programme from existing 4000 to 20000 during the Eighth Plan period. They would be given orientation, IEC material, supply of condoms and oral pills, injectables and information about the nearest service delivery units for referral of contraceptive surgery and IUD cases.
- Besides, the curricula and textbooks used by Tibbia and Homoeopathic colleges would be reviewed for inclusion of family planning component. All identified, interested and enlisted Hakeems and Homeopaths would be persuaded to display family planning sign boards at their clinics/matabs. This component will be coordinated at the district level.

B-Training Arrangements

15. Training is the core support activity of the programme for demand creation and service delivery. It would be intensified during the Eighth Plan to improve the efficiency of the service delivery and to meet the requirement of additional trained manpower.

16. The training activities would be covered under two broad categories. Clinical training for doctors and para-medical staff and orientation courses on managerial and motivational aspects of the programme. The main work load for clinical training would be handled by the twelve Regional Training Institutes, while the managerial and motivational training will be undertaken through the three Population Welfare Training Institutes of the Ministry of Population Welfare, with step down training orientation component to be undertaken in the districts.

17. During the Eighth Plan teaching facilities at all the institutes would be improved, strengthened and updated. The training courses will be made more job-oriented by constant review of training contents, impact assessment and skill enhancement of the faculty members, library improvement, increased availability of teaching aids and by availing the resources/expertise of other training institutions in the country.

18. The skill development agenda of the Regional Training institutes (RTIs) will include basic training of 1703 Family Welfare Workers (FWW's) and regular refresher training of 4615 family welfare workers including advanced training of family welfare counsellors and assistant sister tutors, teachers training workshops for 598 participants and initial orientation/training of 300 new doctors recruited for different service delivery components of the programme and 200 theater nurses and technicians of Reproductive Health Centres. Regular and accelerated training activities would be undertaken for 2713 para-medics of the health sector of AJK, Northern Areas, FATA, Non-governmental Organizations, Target Group Institutions and Private Sector Health Establishment interested to dispense family planning services.

19. The overall co-ordination and guidance to the teaching activities would be given by the Directorate of Clinical Training (as a resource centre), with effective and regular involvement of the provinces. Greater collaboration would be established with the health sector to standardize, enrich and up-grade the skill of concerned personnel for the benefit of both the programme and development of the manpower.

20. The Population Welfare Training Institutes (PWTIs) would impart training to 6730 programme functionaries, 41675 employees of other departments and 46725 community-based groups from different walks of life including hakeems and homeopaths on different aspects of population dynamics, motivation and management. The PWTIs will develop distance teaching programme and specialize in dissemination of information on demographic factors and the motivation for small family norm.

21. The PWTIs will co-ordinate, collaborate and share the load of accelerated training programme of RTIs for the community-based workers in respect of motivation and counselling. They will also provide the forum for seminars to be held for different target audience to highlight population issues.

C- Management Information System

22. The monitoring and statistical functions have not been fully developed to cater for effective management of the programme. As scope of the programme, particularly in rural areas, is being expanded, a comprehensive and efficient Management Information System (MIS) would be developed to monitor the wide-ranging activities of the programme. The information to be monitored and analyzed would include:-

- a. Contraceptive inventory;
- b. Service delivery infrastructure;
- c. Performance of service delivery network;
- d. Staff position at various levels;
- e. Transport and logistic system;
- f. Client profile;
- g. Continuity in the use of contraceptives; and
- h. Follow-up of clients, validation of performance and field monitoring.

23. The existing monitoring and statistics system will be improved and modernized as data will be required at all operational levels including the district, division, provincial and federal set-up for management, monitoring, evaluation and research. The MIS would be accordingly developed and computerized.

24. The divisional level being in the middle of the administrative hierarchy, will play a central role in monitoring analyzing and sending feedback to the operational units. This tier would be brought into the network of Management Information System of the programme.

25. All statistics would be presented in a simplified manner to ensure its full utilization in the management of the programme. At the divisional level, the system would be developed for supporting the field monitoring and ensuring proper recording, reporting and improving the reliability of service and other statistics.

26. The data thus generated would be utilized for regular monitoring, research and review of performance at all operational levels. The results in simplified form will provide the feedback to the field units for improving their activities.

D- Research and Evaluation

27. This component of the programme is a federal responsibility which covers research in bio-medical, reproductive physiology and social and demographic aspects. The main objective of this component is to undertake research which has direct relevance to the programme. The NIRFC and NIPS will continue their research pursuits in their respective fields

28. During the past decade these institutes have undertaken a substantial amount of research which has relevance to the programme. The broad priority areas of research have been identified as below:-

- a. Evaluation of Various Programme Component;
- b. Operation Research;
- c. Demographic Statistics including Projections;
- d. Contraceptive Trials; Efficiency of Methods;
- e. Biomedical Research including Traditional Medicine;
- f. Behavioural and Attitudinal Studies;
- g. Population and Development; and
- h. Action Research.

29. Evaluation of various aspects of the programme, would include service delivery, demand creation, IEC, client awareness and satisfaction as vital areas. The operation research, has been a neglected area and would be a major priority area in the Eighth Plan. In the demographic research, main focus would be on producing reliable demographic data base and indicators. Impact assessment of the programme would be undertaken through periodic contraceptive prevalence surveys.

Contraceptive Requirement

30. The contraceptive requirements shown in Table-11.2 have been based on the demographic goals and targets set for each year including provision for stock building at the central warehouse, service outlets and in the pipeline. The contraceptive requirement and performance will be reviewed and revised on year-to-year basis. This assessment of the requirement for procurement will ensure availability of adequate stock of contraceptives at the beginning of each fiscal year.

31. At present the procurement and distribution of contraceptives is operating according to the "Manual of Contraceptives Logistic System". However, the system will be strengthened further in such areas as record keeping, supervision and monitoring of the distribution in the field. It will be ensured that the contraceptives are kept properly at all stores with adequate storage capacity. In order to improve record keeping and inventory control at the Central Warehouse, the system will be computerized. Details of projected requirements of contraceptives for Eighth Plan are given in Table-11.2.

Table-11.2

Year-wise and Method-wise Requirement of Contraceptives. 1993-98

(Figures in Million)

Method	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1993-98
Condoms(units)	121.987	127.204	130.443	135.129	137.976	147.435	678.186
Oral Pills(cycles)	3.253	3.469	4.526	5.528	6.014	7.372	26.909
I.U.D.(cases)	0.697	0.808	0.888	0.912	1.078	1.168	4.854
Injectables(vials)	1.656	2.004	2.769	3.460	4.446	5.679	18.358
Contraceptive	0.136	0.223	0.279	0.382	0.417	0.430	1.731
Surgery (cases)						0.273	1.045
Foam (bottles)	0.136	0.154	0.177	0.205	0.236		

Demand Creation

32. A well conceived and comprehensive Information, Education and Communication (IEC) strategy, in harmony with the cultural values, will be implemented in collaboration with the Ministry of Information. A distinct communication scheme for urban and rural population has been conceived to meet information and education requirement of these target groups.

33. Full use would be made of TV, radio and press through specially tailored programmes and use of regional languages, Attractive publicity boards, hoarding, neon-signs with appropriate messages would be installed at airports, railway stations, hospitals, bus stands and other important public places. All the service outlets of the programme in public and private sectors would be made visible for the convenience of the target population by fixing direction/sign boards and a whole range of printed material would also be widely distributed.

34. Selected communication campaigns during the plan period would be decentralized and given to the provinces, divisions and districts alongwith functions, funds and authority. The television, radio and press media would be shared both by federal and provincial governments for which adequate funds would be earmarked for the provinces. The provinces would utilize these medias mainly with regional language programmes. The AV Vans would continue to be operated and maintained by the provinces. The Federal Government would be mainly concerned with policy, finances, research, evaluation and communication campaigns in national language through TV, radio and press. National and international conferences would be organized by the Federal Government while provincial and district population conventions and field seminars would be organized by the Provincial Population Welfare Departments.

35. The communication campaigns in rural areas will have the main focus on inter-personal communication with reinforcement of messages mainly through radio and partially through television and press.

36. The community based family planning workers created for expansion of service delivery in rural areas would play a pivotal role in the motivational campaigns in particular in promoting interpersonal communication. The cadre would also be specially trained for motivational role and given necessary IEC materials.

Population Education

37. Population Education through the formal school system in the classes VI to X which was started in 1981, has been taken over by the Ministry of Education to strengthen awareness among teachers and students about implications of rapid population growth for social and economic development.

38. The goals would be achieved through a number of activities covering curriculum development, textbooks reviews and development, teachers training and developing instructional material and audio-visual aids. The activities would be implemented by the Ministry of Education, where Population Education Cell has been established. The Allama Iqbal Open University would also undertake teacher training activities on Population Education.

39. The population education concept would be introduced in the primary classes as well as in the intermediate & graduation levels, by the Ministry of Education (Population Education Cell). The Population Education through non-formal school system would also be introduced by the Ministry of Education (Non-Formal Wing) where a Population Education Cell would be established on the pattern of the existing Education component.

Construction of Buildings

40. The Eighth Plan provides for permanent accommodation to selected institutions and offices of the programme. These include Federal Ministry's office (for which land has been acquired from the Capital Development Authority), two Regional Training Institutes and four provincial Offices of the Population Welfare Departments with PWTIs at Karachi and Lahore.

Innovations

41. A block allocation will be made under this component to test new approaches and potential areas where family planning could be introduced to accelerate its acceptance and improve the IEC campaign. These may also include developing and modifying of programme strategies, introducing service charges, devising reliable information on vital statistics, improving the quality of services, providing a variety of contraceptive methods etc. This component would provide flexibility to the programme to add new elements as the need emerges and potentials are identified. Tested approaches, if found viable and economically feasible, would be considered for introduction on larger scale during the Eighth Plan period.

SPECIAL PROGRAMMES

Federally Administrated Tribal Areas(FATA)

42. The family planning services will be extended to the seven agencies and four frontier regions of FATA through their existing health infrastructure consisting of 320 various types of health outlets.

43. Training will be imparted to Doctors, Lady Health Visitors and Traditional Birth Attendants. Orientation would be arranged for the members of the Jirga as part of the special inter-personal communication campaign. IEC material, sign-boards, equipment and regular supply of contraceptives would be provided to all the outlets. The Provincial Population Welfare Department of NWFP will be responsible for implementation, co-ordination and monitoring of the activates in FATA.

Northern Area Population Welfare Programme

44. A population Cell will be established in the Directorate of Health Services Northern Areas during the Eighth Plan. The service facilities would be expanded by establishing 2 RHS Centres, 12 FWCs, involving 238 Health Outlets of the health department, 23 health centres of Agha Khan Health Services Programme (AKHSP), 300 TBAs and 500 community health workers. The outlets will be supplied with necessary equipment, IEC material and contraceptives. All units will display sign- boards showing availability of family planning services. Training/orienttation, motivation counselling and management will be provided to 23 lady doctors, 100 male doctors, 97 LHVs/FWCs, 976 paramedics and 3300 personnel of other categories.

AJK Population Welfare Programme

45. Family planning activities would be strengthened by involving the existing outlets of the health department and programme and non programme service units. Training/orientation would be provided to 12 gynecologists, 54 lady medical officers and health visitors 250 medical and paramedical staff, 500 Hakeems and homeopaths and 47 village based workers through the RTIs and the Reproductive Health Service 'A' Centres. The outlets would be provided with necessary equipment. IEC material and regular supply of contraceptives.

Financial Outlay

46. The financial outlay for the population welfare programme is estimated at Rs 9.1 billion (also shown under SAP) with following annual requirements.

	(<u>Million Rupees</u>)
1993-94	1247.823
1994-95	1599.399
1995-96	1983.709
1996-97	2095.046
1997-98	2174.023
1993-98	<u>9100.000</u> -----

47. These estimates cover total anticipated requirement of expanded service infrastructure for the rural areas, accelerated training and wide range of IEC activities, increased contraceptives requirement and enhanced provision for contraceptive surgery fee. Physical targets of service delivery and component-wise cost estimates with year-wise phasing for the Federal and provincial programmes are given at Statistical Appendix Tables-III-11.1, 11.2 & 11.3.

III-12

SOCIAL WELFARE

Introduction

The modern concept of Social Welfare differs significantly from age-old tradition of charity, philanthropy, and immediate alleviation of distress without rehabilitation. Development entails wide-spread changes coupled with cultural lags which adversely affect the under-privileged sections of the society, their social patterns and attitudes, and cause rapid growth of economic inequalities, social incapacities, and physical incapacities in them. These by products of development such as economically deprived, socially incapacitated, physically disabled, and emotionally disturbed mainly constitute the clientele or the target group of Social Welfare Services.

Goals

2. The goals of the social welfare programmes are:

- (i) To promote development of Social Welfare programme with active participation of the people and mobilization of community resources to meet social welfare needs at local level.
- (ii) To extend social welfare programmes in rural areas, particularly in distant, far-flung and undeveloped areas in rural setting.
- (iii) To prepare special development projects for revitalization of the existing service institutions/welfare centres established since First Plan period in order to strengthen their functional capacity, expand their scope of work and standardize their services.
- (iv) To make appropriate arrangements for monitoring, review and evaluation of the voluntary social welfare programmes and the financial assistance provided to NGOs by various Government Organizations.
- (v) To establish a Coordinative Body/Umbrella Organization to streamline distribution of foreign assistance to NGOs by various foreign countries and international agencies.
- (vi) To make appropriate arrangement in the Federal Ministry of Social Welfare, to monitor, review and evaluate the financial and other assistance provided to NGOs by various Government Organizations.

- (vii) To organise social assistance/social security programmes on scientific and professional lines for the under-privileged sections of the society through Zakat and Baitulmal system.
- (viii) To make provision of Staff Welfare Services and facilities in order to reinforce efficiency and effectiveness of the Government employees in their job-performance.

Policy Initiatives

3. The following policy initiatives are proposed for the 8th Plan :

- (i) Services for protection, welfare and care of children of women convicts need to be provided by Social Welfare Departments in collaboration with Jail/Home Departments on priority basis. At the same time, services for the poor/destitute families of the prisoners should be initiated by Social Welfare Departments in collaboration with Jail/Home Departments.
- (ii) The Probation, Parole and Reclamation Departments should be established in the provinces of Sind, NWFP and Baluchistan as already setup in the province of Punjab. The probation/parole officers would be necessarily trained Social Workers as in Western Countries and not police personnel.
- (iii) Correctional Services for juvenile delinquents should be instituted in the form of Juvenile Courts, Remand Homes, Borstal Institutions, Certified Schools and Training and Rehabilitation Centers. Pakistan is very backward and lagging far behind in provision of Correctional Services for Juvenile Delinquents in South Asia (the Subcontinent) due to punitive approach adopted by our Police/Jail/Home Departments and their abhorrence to adopt reformatory approach for Correctional Services.
- (iv) The ongoing School Social Work projects started at Karachi which provide counselling and guidance to teachers, taught and parents as well as provision of financial assistance to the poor students is emphasized. The Federal and Provincial Social Welfare Departments in cooperation with Education and Zakat Departments will initiate School Social Work projects at Islamabad, Lahore, Multan, Peshawar and Quetta.
- (v) The ongoing Medical Social Work projects at present confined to Provincial/Divisional and District hospitals will be extended upto the Tehsil Hospitals by the Social Welfare Departments in collaboration with Zakat and Health Departments.
- (vi) The programme for integrated education in ordinary schools for the disabled will be initiated and introduced in each province. These ordinary schools will have the provision of necessary infrastructure in the form of

special education teachers, equipment, books, a visiting doctor for assessment, diagnosis and treatment and an administrative mechanism for implementation of integrated education programme.

- (vii) In view of ever increasing crimes against women and their insecurity in the society as a whole, there is a need to have one "Darul Aman" (Rescue Home) in each District to provide shelter, protection and safeguard to women against criminals. The Women Division will provide capital cost for construction and equipment of all "Darul Amans".
- (viii) There is no law to regulate foreign assistance and foreign contribution from foreign donors or International Agencies. It is, therefore, essential that a specific law should be formulated to regulate foreign assistance to NGOs from foreign donors/international agencies. This law will ensure the security of the country, safeguard the national interest and vouchsafe proper utilization of the funds.
- (ix) There is a need for the standardization of social welfare services on scientific and professional lines. In this context there is an evident need for the establishment of Pakistan Council of Professional Social Workers on the pattern of Pakistan Medical/Nursing/Dental Councils, Engineering Council, Bar Council etc. for the registration of Social Work Practitioners and development of code of ethics and conduct for professionally employed Social Workers.

Management Issues

4. A cause of serious delay in development of Social Welfare programme is the lack of appropriate administrative arrangements. The Social Welfare Departments hitherto have not coordinated with the Social Welfare institutions of local bodies. They need to develop proper linkages with them in order to bring Social Welfare services at the grass-root level. The subject of Special Education is dealt with the Departments of Social Welfare in Baluchistan, NWFP and Federal agencies but in Punjab and Sind it is the responsibility of the Education Department. The subject of Special Education needs to be transferred to Social Welfare Departments in Punjab and Sind as well. Special Education gets the lowest priority in General Education while it is accorded high priority in Social Welfare Sector. Besides, care, welfare, training and rehabilitation of the disabled is neglected under the Education Departments. Juvenile delinquents are dealt with in the Home/Jail Departments and as such introduction of Correctional Services require close collaboration and cooperation between the two Departments of Social Welfare and Home/Jail for successful and effective implementation of programme of Correctional Services.

5. There is a need of constant collaboration between executives and planners of Social Welfare programmes at all levels so that field experience helps in modification of plans while planning experience adds vision to field work.

6. Reorganization of "Zakat" and Social Welfare Organizations should ensure that Zakat and "Ushr" assistance goes through effective institutional arrangements and reorganized modalities with appropriate auditing. Procedures of provision of Zakat and Baitulmal assistance will be redesigned to fairly benefit eligible beneficiaries.

7. At present Social Welfare programmes are dispersed into various Ministries/Divisions/Departments both at the Federal and Provincial levels. These governmental organizations include Special Education and Social Welfare Division, Youth Affairs, Women Division, Central Zakat Administration, Provincial Zakat Departments. Social Welfare activities of these various government organizations should be properly examined and if possible these organizations be unified into one organization within which all the existing organizations may be placed in Sectional Groups. It will ensure gainful deployment of meagre resources, avoid wastage of resources, over-lapping and duplication of social welfare services as well as it will facilitate coordination, cooperation and collaboration in planning, programming and implementation of development programmes by all the social service sectors concerned. If unification of other organizations is not possible atleast Zakat, Baitulmal and Social Welfare Organizations should not operate in isolation from each other at all levels. They should establish workable linkages among themselves in order to facilitate in planning and implementation as well as delivery of services, resource mobilization and utilization.

8. Some of the social legislations are centuries old and have out-lived their utility. The legislations like Societies Registration Act 1860 enforced by the British Rulers to achieve certain political ends should have been scratched by now. This law provides an open General Licence to NGOs to function in any way they like and in fact hood-wink the supervision, regulation and control implied in the 1961 Ordinance. It does not contain any provision for the supervision, inspection or monitoring of NGOs. There is thus a need to have a uniform law governing the affairs of all types of NGOs. Even the Voluntary Social Welfare Agencies (Registration and Control) Ordinance, 1961, has a number of lacunae. The very preamble of this Ordinance seems to be somewhat harsh as it focuses more on the registration and control rather than to encourage the growth of NGOs on scientific and professional lines and to regulate their affairs and facilitate their work. There is no law to regulate foreign assistance and foreign contribution from foreign countries/donors or International Agencies. It is, therefore, essential that a specific law should be formulated to regulate foreign assistance to NGOs from foreign countries/donors/international agencies through a uniform system. This law will also safeguard the national interest and vouchsafe proper utilization of the funds.

9. At micro level, the following improvements in the management of delivery systems of Social Welfare services should be carried out :

- (i) Close supervision should be ensured to provide guidance to the field staff.
- (ii) Periodical returns and progress reports should be obtained for data generation and strengthening feed-back system.
- (iii) Surprise checks and inspection should be regular feature of the programme implementation.

- (iv) Follow-up services should be started to avoid any lapse in programme implementation.
- (v) Surveys and research studies should be carried out to assess the effectiveness of programme planning and implementation.
- (vi) The monitoring and evaluation cells should be established in each ministry/division and departments of social welfare and special education for effective progress monitoring, research and evaluation of ongoing projects/programmes.

Rehabilitation and Consolidation

10. The optimum use of resource will be made for rehabilitation and consolidation of physical infrastructure. In order to integrate, consolidate and intensify social welfare and rehabilitation services, the following measures will be adopted :

- (i) Social Welfare Complexes will be constructed and established in order to house various welfare institutions at one place to offer a package of social services. The proposed complexes will facilitate the beneficiaries/clientele of Social Welfare services to benefit from various professional/technical personnel through referral arrangements. This is not possible if Social Welfare institutions are separated and offer their services in piecemeal fashion. Plots of reasonably good size for this purpose have been already acquired at Lahore, Multan, Dera Ghazi, Sargodha and Bahawalpur. The other provinces should replicate the model of Social Welfare Complex to be started in Punjab.
- (ii) The Special Education Centres under construction at Provincial Headquarters and at Divisional/District Headquarters will be converted into Rehabilitation Complex to cater to the needs of all the four categories of disabled children. This will result upon consolidation of existing centres at one place and savings in the overhead expenditure. It will offer composite welfare services to all types of disabled through referral arrangements.
- (iii) The equipment like sewing and knitting machines provided to industrial homes/women centres of the NGOs established under the Peoples Works Programmes in 1971 have outlived their life and become obsolete. Resultantly many of these centres have become non-functional due to lack of needed equipment. This infrastructure will be rehabilitated by the replacement of needed machinery.
- (iv) After the stoppage of transport support from the UNICEF to the field functionaries of the Social Welfare Departments motivational work had

adversely been affected. Through the hire/purchase scheme of motor cycles/scooters their mobility will be reinforced.

- (v) The dead and dormant NGOs will be revived and reactivated by organizing extensive membership campaigns, arranging their elections and providing financial and technical assistance to them.
- (vi) Evening shifts will be introduced in the Special Education Centres to cater to increasing demand of disabled children who are on the waiting lists for admission in the institutions.

Landmarks of Eighth Plan

(a) *Key Projects and Programmes*

11. Realization and materialization of the 8th Plan goals and policy initiatives will require preparation of feasible and practicable projects and programmes. Most of the programmes will consist of carry - over projects of the 7th Plan. Efforts will be made to improve upon, strengthen, standardize and consolidate them. These programmes are :

Promotion of Voluntary Social Welfare Services/Agencies

- (i) The National Council of Social Welfare will formulate a project for creation of an Umbrella Organization/a Central Coordinative Body to coordinate, control, regulate, monitor, oversee, review and evaluate distribution of financial, technical, professional, equipment and material assistance provided to NGOs by various Government Agencies like National and Provincial Councils of Social Welfare, National Zakat Foundation, Women Division, Youth Affairs Division, Population Welfare Division and Economic Affairs Division (foreign assistance).
- (ii) The Provincial Social Welfare Directorate will prepare projects to establish NGOs Coordinating Councils at District level in order to establish workable linkages among the NGOs to promote inter - agency coordination, cooperation and collaboration for development of social welfare programmes in the private sector. These Apex Organizations of NGOs will be democratically organized by the NGOs themselves who will be their affiliated members. The Government will provide supportive assistance to them to ensure that they perform these functions effectively and adequately and serve as a Resource Centre for collection and dissemination of data/information on NGOs/private sector in Social Welfare.
- (iii) The on-going projects of Grants-in-aid to NGOs will be re-formulated to promote Voluntary Social Welfare programmes/NGOs in rural, distant and far-flung areas which hitherto have been neglected.

Special Education and Rehabilitation Services

12. No progress can be made without training of special education teachers and skilled rehabilitation workers. Therefore, ongoing projects of National Institute of Special Education (NISE), National Institute of Handicapped, Provincial Training Institutes and Sequence of Special Education Training in Allama Iqbal, Punjab and Karachi Universities will be reformulated to strengthen and expand the training programme. Projects for establishment of new Special Education schools and introduction/mainstreaming of special education in ordinary schools will be undertaken both at the federal and the provincial levels.

Social Welfare Services under Public Sector

13. The Federal and Provincial Social Welfare Departments will formulate projects to revitalize all the existing institutions and establish new ones in various fields of Social Welfare services. New projects for model orphanages; centres for lost/kidnapped children; homes for new-born babies found unclaimed and uncared for; day-care centres for children of poor working mothers and school social work units in selected schools with predominance of children from the low-income groups will be prepared and implemented. In the field of Women Welfare priority will be accorded to the projects for establishment of Darul Amans (Rescue Homes) in view of ever-increasing crimes, abuses, trafficking, and exploitation of Women in the country. These projects will ensure that one Darul Amans is established in each district with construction of an institutional buildings. The Women Welfare institutions like lady industrial homes, widows homes, socio-economic centres for Women etc. will be designed in such a manner that their programmes ensure involvement of women in development activities, employment and self-employment for income-generation or economic self-sufficiency of Women. New Rural and Urban Community Development projects will be formulated and implemented in order to mobilize community resources to meet social welfare needs at local level. Self-help activities and popular participation will constitute as main elements of the Community Development Programme. Provincial Social Welfare Directorates in cooperation with Health Directorates will prepare Medical Social Work Projects to provide patient's welfare services with Zakat funds in all the Government hospitals at provincial, divisional, district and tehsil levels. The Social Welfare Ministry in cooperation with Youth Affairs Division will prepare model Youth Welfare projects to impart skill training in various trades and crafts to the Youth of low income groups. Social Welfare Departments in collaboration with Zakat Organizations will undertake projects for control of beggary. The main programme of these projects will be to register beggars, provide them skill training at community level, put them on pay-roll of Zakat prior to their rehabilitation as working/earning members of the society and admit shelterless and homeless beggars into Darul Kifalas wherein they will be provided full boarding facilities. Model projects for Day-care Centres for Senior Citizens and Homes for the elderly without family support will be undertaken. The Government being the largest employer will prepare various projects to provide Staff Welfare Services and facilities to its employees in order to re-enforce their efficiency in job-performance. At present no Social Welfare programme is in operation for protection, security, care and social services for Working Children, particularly for reclamation and rehabilitation of bonded-labour children. The Federal and Provincial Social Welfare Departments in cooperation with Zakat Organizations will initiate and formulate suitable projects which will include programmes for supportive assistance, security arrangement, skill-training

and rehabilitation of working children. Rapid increase in industrialization and the consequent process of urbanization, along with various other social and psychological factors, have increased the rate of delinquency in the country, particularly among the juveniles. The need for Correctional Services is urgent. Besides, the female convicts in jails are miserably treated and neglected. Therefore, the provincial Social Welfare Departments in collaboration and cooperation with provincial Jail/Home Departments will initiate Correctional Services as well as services for protection, welfare, and care of women convicts both in the jails and in their homes. The Probation, Parole and Reclamation Departments will be established in the provinces of Sind, NWFP and Baluchistan as already set up in the province of Punjab. The Probation Officers will be trained social workers instead of Policemen as in developed countries.

Zakat and Baitulmal

14. The Nizam-e-Zakat was introduced in the country through the promulgation of Zakat and Ushr Ordinance 1979. The experience gained over the past years showed that it had been instrumental in promoting dependency through dolling out money to the six categories of Mustahqeen and as such resulted upon restricting its utilization on the basis of the doctrine of (TAMLEEQ) i.e. transfer of ownership. In order to widen the scope of the utilization of funds a welfare fund to be called as Baitulmal will be financed from transfer of receipts from tax, grants from Federal, Provincial and Local Authorities, Organizations, International Agencies, Voluntary donations including Sadqat, Khairat etc.

15. The Baitulmal shall be administrated by a Board and shall be utilized for following purposes as per Baitulmal Act :

- (i) to provide financial assistance to destitute and needy widows, orphans, invalid, infirm and other needy persons;
- (ii) to render help for rehabilitation of all categories of beneficiaries in various professions or vocations;
- (iii) to provide assistance to the children of the beneficiaries for educational pursuits;
- (iv) to provide residential accommodation and necessary facilities to the beneficiaries;
- (v) to provide for free medical treatment for indigent sick persons and to set up free hospitals, poor houses and rehabilitation centres and to give financial aid to charitable institutions, including industrial homes and other educational institutions established specially for the poor and needy;
- (vi) to provide stipends to educated youth during their training before their employment in jobs;

- (vii) to provide stipends and financial assistance to brilliant but poor students who cannot afford to acquire higher technical or medical education abroad for lack of money;
- (viii) to sponsor and promote self-employment scheme; and
- (ix) any other purpose approved by the Board having regard to the aims and objects of the Baitulmal.

16. The Board shall be under the direct administrative control of the Prime Minister of Pakistan and the Social Welfare Division will function as the Coordinating Division for the Bait-ul-Mal. The Board shall function through the Provincial, Divisional, District Committees or sub-Committees consisting of such members as may be prescribed by it from time to time. The existing National Zakat Foundation will be merged with the Management of Bait-ul-Mal.

(b) Breakthrough/Benefits

17. Any real breakthrough in a small sector dealing with a fraction of the disadvantaged population is hardly possible. Some of the benefits accruing from the social welfare projects are briefly given below:

- (i) The construction of purpose-built buildings will not only provide conducive atmosphere to the various categories of the disabled children, well-suited to their requirements, but would also relieve the Special Education Departments from exorbitant rental expenditure. It would increase the enrollment capacity of Special Education Centre from 50 to 200 each, thus increasing the total enrollment from present 2000 to 10000 by the end of the 8th Plan.
- (ii) With the establishment of primary special schools for the handicapped in the remote districts, a good number of disabled children will have an access to educational facilities.
- (iii) Through the community development projects motivational efforts will be geared-up to organize new interest groups and NGOs to supplement the Government efforts for undertaking need-oriented programmes such as safeguarding the rights of child and child abuse etc. One thousand new NGOs will be established in far flung rural areas with the provision of financial as well as technical and professional assistance through field social workers.
- (iv) Through "Salai Markaz", Socio-Economic Centres and Local Skill Training Centres numbering more than 5,000 about 5 million women will be imparted training. Order work would also be provided to 2000 women registered as skilled workers.

- (v) Through the Medical Social Service Projects established in big cities, district and Tehsil (HQ) Hospitals more than 1 million poor patients will be assisted. They will be provided drugs, blood, orthosis, prosthesis and financial assistance including counselling and guidance services.
- (vi) Boarding and lodging facilities will be provided to nearly 2000 women through hostels for working women.
- (vii) Through mother and children home (widow homes), destitute homes and rescue homes four to five thousand widows, destitute and way-ward women will be provided institutional care, training and rehabilitation services.
- (viii) Model orphanages, abandoned babies and destitute children homes, centres for lost and kidnapped children to be established under the public and private sectors will protect eight to ten thousand children from child abuse and child neglect.
- (ix) National Institute of Handicapped at Islamabad which was established to cater to treatment requirements of all categories of the disabled in the country will provide cold elective surgery facility to 5000 patients during the 8th Plan period.
- (x) Teachers training will be imparted to nearly 2000 teachers from Special Education Schools both in the private and public sectors.
- (xi) Stipendiary support will be provided to 85,000 school and college going students of federal government employees, particularly low-paid employees.
- (xii) Rest and recreation facilities will be provided through 4 Holiday Homes at Murree, Kinjer Lake, Sandspit (Karachi) and Ziarat to 1,25,000 government employees.
- (xiii) The Multipurpose Community Centres will facilitate convening and holding of sports and cultural programmes, religious functions and library services to 1,25,000/- beneficiaries.
- (xiv) The turn-over of beneficiaries from 'zakat' funds during last one decade, who were provided subsistence allowance, rehabilitation grants ~~medicare~~, stipendiary support, grant to 'Deeni Madaris' and social welfare institutions had been 1,35,38,117 who were provided assistance worth Rs. 7889.264 million. This tempo will be maintained during the 8th Plan. The existing 'zakat' system will be streamlined by reorganizing local zakat committees on professional and scientific lines to utilize the 'zakat'

assistance for the rehabilitation of the needy rather than creating parasites. The scope of the utilization will be widened by establishing welfare fund called 'Baitulmal'.

Targets and Allocation

18. The Eighth Plan Physical Targets for various fields of Social Welfare will comprise completion and establishment of 506 units of ongoing and new service institutions. There are 3415 existing social service institutions established since the First Plan period. Most of them require revitalization in order to strengthen their functional capacity, expand their scope of work and standardize their services. Some of them will be picked up for upgradation and improvement. Details of Physical Targets are given in Statistical Appendix Table-III-12.1.

19. The 8th Plan provides a tentative allocation of Rs. 1.460 billion (Federal Agencies-Rs. 1 billion and Provincial Agencies-Rs. 0.460 million). This allocation appears to be rather on the high side against the 7th Plan allocation of Rs. 940 million, but in view of huge expenditure to be incurred on throwforward projects and enhancement of consumption capacity of the executing agencies at all levels, this allocation is realistic. Agency and Programme-wise details of 8th Plan outlay is given in Statistical Appendix Table-III-12.2

III-13

NARCOTICS

Production sale and abuse of narcotics is a recent phenomena in Pakistan which is growing rapidly. The number of heroin addicts alone, estimated on rather cautious projections, would now be around 1.7 million. This grave abuse situation is compounded by a known and well perceived trend of abundant availability and use of psychotropic substances, so the overall drug dependent population is projected to stand in the neighborhood of 2.5 million. This is already an epidemic situation and may well be at the top of global tabulations.

2. Government of Pakistan has on more than one occasion expressed its resolve to abide by its commitments to eliminate hazards of drug abuse. Creation of a separate Ministry of Narcotics Control is a manifestation of this resolve. This resolve and determination of the Government of Pakistan is being translated into Public Policy aiming at the following objectives.

- a) elimination of production ranging from cultivation of narcotic crops and harvesting of opium and/or cannabis to processing of their derivatives such as heroin etc.
- b) elimination of supply through vigorous enforcement interventions: and
- c) elimination of demand by means of a nation wide treatment and rehabilitation programme in tandem with preventive education and public awareness projects.

3. These objectives will be attained by taking the following steps:

- a) Identifying the problems in specific terms by periodic surveys - once in 4 years;
- b) Forging a self contained Master Plan to include demand reduction, prevention, enforcement and supply elimination components;
- c) Establishing a monitoring and evaluation organ so that control, spread, or reduction of demand could be identified on a regular and institutionalized basis; and
- d) Encouraging community participation through non governmental organizations and maximize use of NGOs in developmental, rehabilitation, and mass education/preventive programmes.

4. The Eighth Plan will aim at:

- a) elimination of poppy cultivation by the end of the Plan;
- b) elimination of heroin laboratories by 1994; and

- c) attaining of Drug Free Society in Pakistan by the year 2000.

5. The above goals may seem a tall order but efforts must be made to achieve these goals. Any other option would tantamount to imperiling the national economy, national security and prolonging of the agony of the people who have fallen victim to drug abuse. In this context following measures are being taken:-

- a) A Comprehensive Law on Narcotics Abuse Control is being drafted and it will soon be available for inviting comments of all concerned agencies;
- b) An Ordinance has been promulgated to set up an Anti Narcotics Task Force which empowers the members of the force with widest Police powers of search, arrest etc. and
- c) The relevant law has been amended to provide for pre-trial destruction of seized narcotics. Acetic Anhydride (the essential chemical required for the conversion of opium into heroin) has been brought under control for purpose of import by industrial consumers, other precursors and essential chemicals having potential use in the illicit manufacture of narcotic drugs are also being brought under control.

6. Following additional measures are proposed during the Eighth Plan:-

- a) **Narcotics Policy Commission:** A Narcotics Policy Commission (NPC) may be set up. The Commission should meet regularly, review from time to time the performance made by different organizations for the achievement of the national objectives and make recommendations to the Federal Government on policy issues pertaining to narcotics abuse control. The Narcotics Control Division should serve as the Secretariat for the Commission.
- b) **Narcotics Control, Monitoring and Evaluation Board:** With a view to keep the performance of the various agencies concerned with narcotics under constant vigil, review and to ensure more effective coordination amongst them, a Narcotics Control, Monitoring and Evaluation Board (NMEB) be immediately set up. The NMEB will meet every quarter to review, monitor and evaluate and make necessary recommendations. The Federal Enforcement Agency should serve as the Secretariat for the NMEB.
- c) **Community Awareness, and Preventive Programme:** In securing the objectives stipulated above, the national policy should aim at harnessing the widest community support. It should be possible to do so by a well planned Awareness Programme alongside a Preventive Education Campaign. Ministry and Departments of Education will be involved in drawing out the details of the Education Campaign.

- d) ***Treatment of Addicts:*** The most difficult component of a demand reduction programme is that related to treatment of addicts. National policy besides creating specialized treatment centers, will aim at enlisting the widest possible support of the practicing medical community. In other words, the objective should be to make treatment facility for average addicts available at community level also. Assuming availability of a qualified doctor for every 2,500 inhabitants of the country and keeping in view the estimated 2.5 million drug addict population, it should average at 50 patients for one doctor to treat. It is well known that such simple mathematics does not work meticulously in case of drug abuse control programmes but it is also well known that programmes based on a wide support of the medical community are more successful than those based on specialized treatment modalities. Furthermore, awareness and preventive education activities would get a boost through treatment programme based on the community rather than one designed to promote professional specialization.
- e) ***Integrated Demand Reduction Programme:*** It is fortunate that detailed framework of an Integrated Demand Reduction Programme is already available which could be put into operation after dovetailing provincial components into it. In fact, having done this, the first brick of a national demand reduction structure would have been laid.
- f) ***Enforcement Coordination Programme:*** It is an irony of any drug abuse control programme that enforcement projects are necessary tools to promote and protect development projects whether aimed at curtailment of production and supply of drugs or targeted at treatment and rehabilitation. Viewed in this light, the national policy would do well to commit itself to the development of a National Enforcement and Coordination Programme, tying up Federal and Provincial Agencies and coordinating their activities at a focal point under the Narcotics Control Division. This Programme should have operational, training, information sharing, research and other necessary components.
- g) Looking at the indulgence of women folk in the abuse of drugs special consideration is needed. In this regard Ministry of women development and some of the NGOs (specially more involved in programmes for women) shall be contacted to chalk out workable programmes.
- h) ***Province Role:*** While the burden of commitments stemming out of the international treaty obligations rests on the shoulders of the Federal Government, bulk of programme implementation would fall in the provincial sphere of responsibility. An outstanding example is that of Special Development and Enforcement Programme which is a Federal Government Plan for integrated rural development of poppy growing areas in NWFP while its implementing mechanism is the Special Development Unit of the Provincial Planning and Development Department. This example should be replicated in case of other Provinces.

7. Details of Action Programme for the Eighth Plan Period are given below:-

i) **Area Development Projects:** The first step is the elimination of the poppy cultivation. It is recommended that in the proposed area development projects due emphasis should be given to establish agro-based industry in the project areas where feasible, and other industries in order to generate employment opportunities for the people of the area. The Government is implementing quite a few poppy crop substitute and area development projects in poppy growing areas of NWFP. During the Eighth Plan it is proposed to implement development projects in areas not covered earlier.

ii) **Narcotics Levies:** The Law Enforcement in FATA is the responsibility of Political Agents, an institution developed to protect and perpetuate imperial interests. It is now time to take bold initiatives to bring the FATAs in the mainstream of national political and administrative structure. However, as an interim arrangement it is recommended that Narcotics Levies be created for the poppy growing areas in FATA in order to enforce ban on poppy cultivation in accordance with the existing policy and the scheme of things that may henceforth be enunciated.

iii) **Heroin Laboratories:** The presence of heroin laboratories in FATAs, largely in Khyber Agency, provides incentive to farmers to resort to poppy cultivation. These laboratories must be banished as otherwise all efforts to eradicate poppy cultivation would remain unproductive. The political authorities must vigorously enforce law in this regard and destroy all the laboratories by the end of 1994, without waiting for the establishment of proposed Narcotics Levies.

iv) **Treatment:** The treatment has to be seen in the context of definition and concept of treatment. An internationally agreed definition of treatment is:-

"A broad range of services, including identification, brief intervention, assessment, diagnosis, counseling, medical services, psychiatric services, psychological services, social services and after-care for people with drug problems. The overall goal of treatment is to reduce or eliminate the use of drugs as a contributing factor to physical, psychological, and social dysfunction, and to arrest, retard, or reverse the progress of any associated problems".

At present the concept and practice of treatment is based on a medical model which stops at detoxification. The rehabilitation part is ignored. Detoxification is only the first aid. The next five year plan should therefore ensure the implementation of a comprehensive plan for treatment as well as rehabilitation. The outline of such a plan is as follows:-

PHASE I

1st year of the plan period:

Establishment of resource centers (vide infra) at each of the teaching departments of Psychiatry in the country.

PHASE II

2nd year of the plan period.

Establishment of treatment and rehabilitation facilities at District Headquarter level.

PHASE III

3rd year of the plan period.

Establishment of treatment and rehabilitation facilities at Tehsil Headquarter level.

PHASE IV

4th and 5th year of the plan period.

Consolidation and extension of facilities to the Primary Health Care level.

v) **Resource Centers:** The resource centers established in Phase-I will be responsible for development of teaching, training and educational material about drug abuse. These centers will also be responsible for development of treatment and rehabilitation programme to ensure uniformity and cost-effectiveness. Resource centers will also be responsible for supervision, provision of support and development of referral chain in this programme.

vi) **Minimum Measures:** The following minimum measures are proposed for implementation during the Eighth Plan Period.

- i) Sale of psychotropic substances without prescription of a Registered Medical Practitioner should be banned immediately;
- ii) Treatment and rehabilitation of drug addicts should be a part and parcel of the Health Care system in Pakistan;

- iii) Detoxification Centres should be established throughout Pakistan at teaching hospitals and District Headquarter Hospitals.
- iv) The teaching hospitals will act as centers of excellence, providing training to medical and allied personnel. They will be called Drug Information and Detoxification Centres.
- v) In the city where teaching hospitals and District Headquarter Hospitals both exist preference for the establishment of Detoxification Centers will be given to teaching hospitals as it has more facilities;
- vi) There may be more than one center of excellence in a city.
- vii) Mental Health and Psychiatry should be given their legitimate importance both in the academia and in the curative care facilities.

vii) **Detoxification Centers:** There are 31 Districts in Punjab 18 in Sindh, 16 in NWFP, 20 in Balochistan and 1 in Federal Area where Detoxification Centres may have to be established or extended along with the hospitals attached to medical colleges. The staff to run the Detoxification Centers will be provided by concerned Federal/Provincial Governments. The requirements for the purchase of equipments, establishment of laboratories, vehicles and other relevant requirements shall be funded by the Federal Government. At present, in the teaching hospitals the staff members of the Departments of Psychiatry are being utilized for the treatment of the drug addicts. In view of the role to be performed by the Drug Information and Detoxification Centers, it would be necessary to allocate additional staff for the said purpose. The requisite staff shall be provided by the respective Provincial Governments.

The detoxification facilities will also be extended to AJK and Northern Areas. These facilities will be established at DHQ hospitals depending on the severity of the problem.

viii) **Rehabilitation:** Detoxification measures alone will not succeed to cleanse the blood streams of drug addicts. At present the relapse rate is very high, largely due to the fact that the treatment is not backed up by rehabilitation services. Treatment and rehabilitation should be part of an integrated programme extending over a period of 6-12 months. In first 4-6 weeks evaluation (physical and psychological) and detoxification should be carried out. This should be followed by skills training which will be dictated by assessment of attitude and potentials in certain identified areas e.g:

- i) handloom operation, carpet making, woodwork etc.

- ii) gardening, farming, landscaping, poultry, cattle farming etc.
- iii) repairs of electronic equipments; and
- iv) administrative work like typing, short hand, book keeping etc.

This should be followed by placement in appropriate jobs. Till they get jobs, they should stay in half-way houses or hostels and on getting jobs they may be repatriated to the community. One model rehabilitation center may be set up in each province in order to provide above skills and services to the detoxified addicts. These may be taken up as a pilot project by the provincial governments.

ix) **Role of NGOs:** The government agencies generally tend to concentrate on supply reduction measures. They mostly remain engaged in enforcement operations and cannot pay adequate attention to socio cultural factors that lead people to drug abuse. The NGOs can, therefore, play a very meaningful role in (i) the realm of demand reduction by taking care of the social forces that push people to drug abuse and (ii) rehabilitation and follow up of addicts once they have been detoxified.

x) **Mass Awareness and Community Participation:** Drug abuse control programmes will not achieve the desired objectives without participation of the community and educating them about the deleterious effects of abuse of drugs. An institutional structure in the form of Drug Abuse Prevention Resource Center already exists. It should be brought on a regular footing and the Centre should organize and carry out the following programmes:

- i) campaigns over electronic and print media against drug abuse;
- ii) training of at least one teacher from high schools and colleges, including vocational training institutions, in a district in the identification of drug addicts and their counselling and management;
- iii) Training of at least one Supervisor, from each work place employing more than 100 persons, in the identification of drug addicts and their counselling and management.
- iv) Publication of brochures, pamphlets, and material on community participation in drug abuse for dissemination to organizations and individuals actively participating in drug abuse control measures.

xi) *Research*: It is an admitted fact that drug abuse is a multi faceted and complex phenomenon encompassing all areas of human behaviour, social psychological, economic etc. Research studies and their findings in this area will be important tools to effectively steer the national efforts towards the desired goals. It is proposed that a National Research Institute for Drug Abuse may be set during the Eighth Five Year Plan Period.

8. An amount of Rs.3322.00 million is earmarked for the above programmes as summarized in Statistical Appendix Table-III-13.1.

III-14

TOURISM, YOUTH AFFAIRS , CULTURE & SPORTS

This sector has four sub-sectors: Culture, Sports, Tourism and Youth. Archaeology also falls within the domain of culture. The foremost goals are: preservation and conservation of historical monuments and archaeological sites; archaeological excavations; promotion of our culture and values; encouraging folk art; adoption of modes and methods which will reflect our cultural heritage and art. These goals are related with Tourism sub sector. The restoration and rehabilitation of the remains of ancient civilizations will boost tourism industry. The main goals in the tourism sub sector are to provide economical hotel and motel facilities at all stations and resorts; provision of reliable transport; providing adequate security to foreign tourists and publicity of the hill stations and beautiful valleys of Pakistan through pamphlets and video films. The importance of sports for a healthy society is overwhelming. The goals in this field are to provide sports stadia to maximum youth population; establishment of training and exercise centres; laying of synthetic athletic tracks and austro-turfs in various stadia and construction of youth vocational training centres in rural areas. The sub-sectors of sports and youth are closely related. They both aim, at channelising potential and energies of the youth.

I-TOURISM

2. A long term policy framework for development of tourism has already been provided in the tourism policy. As nearly 90 per cent of the tourist industry; mainly the hotels, the transport, travel operations and marketing is owned and operated by the private sector; optimum growth can be achieved by providing necessary incentives and freedom of action. The tourism policy has already given a promising package to allow them to rise to the expectations and transform the tourism industry into an important economic activity where tremendous employment opportunities are available.
3. The public sector agencies would create tourist facilities in areas where private sector is not forthcoming and/or provide necessary investment in tourist related programmes where the facilities could be leased out to the private sector. The Government will accord top priority for improvement, expansion and building up roads and telecommunication network with a view to provide improved facilities to domestic and foreign tourists.
4. The public sector agencies will be assigned the responsibility of creating training facilities, recreational facilities at the federal capital and in the coastal areas; tourist resorts, tourist accommodation at 37 sites throughout the country and special tourist related schemes in Northern Areas. In addition, a large number of provincial schemes for road-side tourist facilities, rest houses and recreational facilities in the Punjab, Sindh, NWFP, Balochistan and Azad Kashmir will be funded on 50% matching grant basis.
5. An attractive environment has already been created to allow the private sector to make large investments in the tourism sector. The policy package ensures substantial monetary and fiscal incentives for investment in all tourism related facilities including funlands, amusement

parks, hotels, motels, cultural centres, travel and transport tourist services agencies, handicrafts etc., tourism is now not only a recognized industry entitled for benefits and concessions and treatment but also enjoys a 'deemed export' status particularly in the case of hospitality and travel trade sector.

6. Some programmes for promoting the tourism in Northern Areas in particular and rest of the country in general are:

- a. A road linking Garam Chasma with Badakhshah and Chitral Gilgit was essential for opening up road links with Central Asian States. The National Highway Board may consider the feasibility of these projects.
- b. Work on widening, improvement and expansion of facilities at Chitral, Gilgit and Skardu airports will be taken up by the Aviation Division.
- c. Mobile telephone system will be extended to Northern Areas.
- d. Road from Murree to Kohala and beyond needed up-gradation. The National Highway Board will under-take a project for the construction of this road.
- e. Construction of run-way at Mansehra will be undertaken.
- f. High quality publicity films will be prepared and screened on board the PIA air-crafts. These video cassettes of tourism publicity films will be available for sale on all PIA air-crafts. The Finance Division will explore the possibility of allowing 15 days rest and recreation leave along with half month's salary ensuring that the public servants availed the leave facility compulsorily outside their usual place of residence.
- g. The PTDC transport fleet will be strengthened by adding some coasters.
- h. Camping sites will be established in Drawar Fort and Islamabad. These camping sites will be equipped with medical facilities, telephone, toilets and cooking arrangements. The camping sites could be leased out to the private sector.

7. Tourism is predominantly a private sector activity and public sector is associated only as a catalytic agent to provide policy direction, to undertake development activity where private sector was not attracted and to undertake projection and promotion work abroad.

8. The level of private investment in the hotel, transport and travel industry was expected to be Rs 5.4 billion during the Seventh Plan. This included investment in transport (Rs 400 million) and construction of 6,600 additional hotel rooms at a cost of Rs 5 billion, 30 per cent of this investment was to be met from retained earnings while the balance to be borrowed from financial institutions.

9. Private sector will play key role in the creation and operation of tourist industry. The policy package ensures substantial lands, amusement parks, hotels, motels, cultural centres, travel and transport tourist services agencies, handicrafts etc.

10. The estimated investment by private sector during 1992-93 is estimated at Rs 2.563 billion which is expected to increase to Rs 9.396 billion by end of the Plan period. Cumulatively, the private sector is likely to make an investment of Rs 39.488 billion over the 5-year period. About 30-40 per cent of this investment will be made from retained earnings and equity while the balance will be raised through loans. The tourism policy has recommended adequate credit facilities for the tourism industry for meeting their financial requirements.

II-CULTURE & ARCHEOLOGY

11. Culture, in a broader sense, covers organised social behaviour and values inherent in language, arts, literature, traditions, ideology, conventionalized shared experiences and cognitive structures. Culture reflects the national image and helps infuse a sense of pride and national identity.

12. Recent studies have indicated that the level of development of arts, knowledge, skills and technology influences the socio-economic status of a society. Similarly, an array of business practices, geographic conditions, societal and institutional characteristics of people and quality of government, all determine the competitive advantage of nation. Thus culture has the potential of contributing to economic growth and development.

13. The cultural development programmes are aimed at preservation of Pakistan's rich cultural heritage within a policy framework which should lay stress on consolidation of foundation of faith, revitalizing Islamic values and ideal of peace, justice, equity and brotherhood, and to provide supportive services for promoting creative genius of the citizens in all avocations. It provides for promotion of various streams of culture, like sub-cultures and regional cultures and their assimilation into main stream culture. During 7th Plan it was proposed to formulate national cultural policy by integrating various aspects of cultures, but the same has not materialised. The 8th Plan pursues this policy.

14. Preservation of heritage was a neglected field in the past but the Government has given due attention to this aspect in the recent years. Suitable allocations have been provided in the ADPs for the archaeology schemes and efforts are being made for training the manpower in the preservation and restoration works. Private sector is being invited to play role in the cause of preservation of our heritage. For this purpose a 'National Fund for Cultural Heritage' has recently been established. The fund will also be used to create awareness in the masses about our magnificent heritage and need for its preservation.

15. For the preservation of our cultural heritage, protection is provided under the provision of the Antiquities Act, 1975. So far 380 sites/monuments have been declared as protected under the said Act. Efforts are being made to provide protection to more archaeological sites and monuments. Six sites/monuments of Pakistan have been inscribed on the UNESCO World Heritage List which includes an important national monument at Moenjodaro for its

safeguarding. UNESCO/UNDP have entered into an agreement with Pakistan for providing technical assistance and local and foreign training of technical staff for documentation work at site. More foreign assistance both financial and technical, will be explored for preservation of cultural heritage.

16. The programme of Archaeology & Culture sub-sector includes construction of 2 spurs/embankments for flood protection, groundwater control and conservation of archaeological museums at Moen-jo-Daro, conservation and preservation of historical monuments at Lahore, Okara, Wah, Makli and expansion/modernization of archaeological museums at Taxila and Rohtas Fort. The second phase of the National Archives Building at Islamabad will be completed to promote cultural and historical research.

17. A National Museum will be established at Islamabad for which an allocation of Rs 150 million is made in the plan. A National Art Gallery will also be completed at Islamabad, for which Rs 90 million are allocated in the Plan.

III-SPORTS

18. The basic objective of sports development is to expand sports facilities for the benefit of the majority of the people. Incentives will be provided to local bodies for support to playing facilities at local level for a continued flow of good sportsmen. Private sector agencies and NGOs will be encouraged and supported to generate and mobilize resources locally to enhance the resource base.

19. To build a healthy nation, a healthy youth has to be prepared. Unfortunately, the sports facilities had been confined to some special areas of the country. Construction of sports stadia at tehsil level was envisaged in the 6th and 7th Plans to provide sports facilities at grass root level. Under this programme 10 tehsil level stadia each at a cost of Rs 2.5 million are being established in Punjab, NWFP, Sindh, Balochistan and Azad Kashmir. Of these 2 stadia in the Punjab, were completed, while 8 units are in different stages of completion. Similar Programmes are underway at district level countrywide. Eighth Plan provides an expanded package for development of sports activities to enhance the competitive capacity of various national sports including hockey, squash, football and cricket.

20. In the Sports sub-sector three new sports stadia will be constructed. Two football stadia will also be constructed one each in Punjab and Sindh (Lyari Karachi) for promoting football training in youth population with total Federal funding at a cost of Rs 30 million each. The ongoing sports Stadia at Sukkur, Khairpur and Manshera will also be completed for which matching grants of Rs 11 million will be provided to provincial governments. Besides, synthetic tracks will be provided at Karachi, Lahore and Peshawar to encourage sportsmen for track events. The second phase of the national swimming pool, Islamabad, will also be completed. Two swimming pools will be established at Karachi & Lahore. Remaining civil works of coaching centre at Lahore will be undertaken to cater to the needs of local population. Two cycling velodromes at Karachi and Lahore will also be constructed for increasing sports facilities in the country. Besides, Rs 30 million will be spent on the schemes of sports for women.

IV-YOUTH DEVELOPMENT

21. The youth received separate treatment in the Sixth Five- Year Plan for the first time and an outlay of Rs 80 million was made for vocational training, youth hostels and sports facilities. The non-governmental organizations (NGOs) were provided grants to improve and upgrade eleven existing youth hostels besides grant-in-aid was provided for the construction of youth hostel at Islamabad, Peshawar and Quetta. Funds were also provided to the provincial governments for establishment of skill development training centres.

22. In the 7th Plan, the thrust was again on NGO based programme in promoting non-formal education, skill development, cooperatives, recreation and community services. The broad-based strategy for youth has the following elements:-

- i) Well organised youth NGOs with trained and motivated cadres were to be created alongwith necessary legal and regulatory measures for proper conduct and accountability.
- ii) A proper technical and administrative structure was evolved to guide and assist the NGOs in the operation of their programmes; and
- iii) A 3-tier coordination framework was to be provided at the national, provincial and district levels both by the NGOs, and the government. The coordination structure provided for effective guidance for community participation, programming and funding.
- iv) Financial support and public sector commitment was encouraged to back NGO based programmes on a matching grant basis.
- v) Training of 11,140 key NGO personnel was to be arranged in the techniques of planning, organizing community services and implementing small youth related projects on self-help basis, with essential inputs from the government. Rural based NGO will be given priority in training. Seminars and workshops will be organised to promote innovative ideas and exchange of information and experience among the NGOs from all over the country.

23. Currently 79 vocational training centres in rural areas of the country are imparting skills in marketable professions to the drop outs. The programme includes training in the field of electrical, mechanical, welding, carpentry, tractor driving and maintenance, garments making, embroidery and poultry. This programme has two-fold benefits: (a) Provision of technical skills to rural youth to make them economically productive; (b) Scaling down the migratory trend from rural to urban areas.

24. These centres are managed on behalf of the Youth Affairs Division by agencies of Provincial Governments. Almost 17,000 participants have now passed through courses of 6-12 months duration, in a variety of trades selected by local management committees on the basis

of local circumstances. An amount of Rs 67 million has been earmarked for the Centres during the 8th plan period.

25. The Youth hostels provide furnished accommodation and other services on very nominal rates to youth. The purpose of establishing these hostels was to encourage youth to move around to see commonalities and diversities of their country's land and culture, to learn the history and traditions and to meet the people in other parts of the country.

26. A voluntary non-governmental organisation, Pakistan Youth Hostels Association, which is affiliated with International Youth Hostels Federation, has constructed these youth hostels at various places, with the support from Youth Affairs Division. Out of five units three hostels one each at Islamabad, Quetta and Peshawar have been completed while the remaining two are at various stages of implementation.

27. A comprehensive National Youth Policy will be prepared in consultation with the provincial agencies; NGOs and other nation building departments. This policy should provide a practicable outline for the orientation, harmonization, and coordination of the policies, strategies and programmes of all the governmental and non-governmental organisations and institutions affecting 'young peoples' participation in the social, economic, cultural and political development of the country. The programme will aim at creating conditions where youth stand educated, employed and free from any drug addiction, frustration, parochialism, sectarianism and numerous evils which have beset our society. The youth have to be prepared to enter 21st Century with confidence. The upcoming years will witness a boost in the Water Sports to be provided at different lakes. Indoor games like Table Tennis, Tennis, Volley ball, swimming and folk events will be supported adequately to prepare for international and regional events.

28. In the 8th Plan greater emphasis has been laid on promoting non-formal education, skill and career development, self-employment, recreation and community services:

- i) **Skill training and Career Development:** The ongoing programme for skill development at the same town level, through 79 centres, will be continued. The expected output of trained youth per year is 6,000 persons, and over 30,000 persons will get training in marketable trades during the Plan period. Career guidance and counselling centres will be set up at selected universities to provide information on job training and employment opportunities. Under-graduate and post-graduate studies in youth leadership will be encouraged.
- ii) **Self-Employment:** Although the employment opportunities are created in all sectors of the economy special efforts will be made to encourage self-employment among the youth through concessional financial assistance. The youth Investment Promotion Society (YIPS) and other financial institutions will provide loans for employment activities, the total size of which will be doubled to Rs 3 billion per year. An employment fund of Rs 10 billion will be created to provide substantial assistance and guidance for the youth to promote self-employment among the educated youth in small industry and service sectors.

- iii) **NGO-Based Programme:** Twenty youth development centres (YDCs) will be established at National and at selected provincial, district and tehsils with the main objective of promotion of literacy and training in income generation skills. Besides, these centres would develop management information system (MIS) for researchers and youth workers. These centres will work under the supervision of public representatives, provincial agencies and NGOs.
- iv) **Rest and Recreation Facilities:** Special programmes for rural youth are recommended for expanding sports and recreation facilities at grass root level. The 8th Plan should also provide for creation of sports stadia at town/village level and youth hostels at selected places for recreation of the youth population. Association of NGOs should be considered for mobilization of community resources for the projects. The network of tehsil level sports facilities will be enlarged by completing 5 stadia at selected towns/tehsils. Five units of youth hostels will be constructed at Karachi, Murree, Muzaffarabad, Thandiani and Changla Gali through grants to NGOs.
- v) **Youth Development Fund:** The youth development revolving fund of Rs 5 million, established during 1990-91 will be continued during the Plan period. Financial support and technical and administrative assistance will be provided to motivate implementation of youth programmes on self-help or matching grant basis. Youth volunteer corps will be organised with the assistance of educational institutions and NGOs to undertake community welfare programmes. Besides, youth mobilization will be undertaken through mass media by creating awareness and sense of motivation for productive activities. In addition, training of 11,140 key NGO personnel will be arranged in the techniques of planning, organizing community services and implementing small youth related projects on self help basis, or with essential inputs from the government. Rural based NGOs will be given priority in training. Seminars and workshops will be organised to promote innovative ideas and exchange of information and experience among the NGOs from all over the country.
- vi) **Youth Investment Promotion Society (YIPS):** Realizing the important role of YIPS at providing self employment opportunities to educated unemployed youth has enhanced the lending limit of the society from Rs 50,000/- to Rs 100,000/- per individual. Following the Self Reliance strategy initiated by the Government, YIPS has fostered its efforts towards generating employment opportunities to educated youth. A simplified procedure for sanctioning of loans has been formulated by YIPS, which would have positive effect upon the efficiency of YIPS operations.
- vii) **Volunteer Youth Group:** Volunteer youth-group work schemes designed to involve the youth population in the development process will be promoted. For instance they can help in construction of farm to market roads and improvements of existing network, play-grounds, at rural level, renovation of rural water tanks, etc. Volunteer work camps could be organised in the target areas with support of

transport, accommodation and food. Selection of projects and areas of activities can be made by NGO coordinators with federal, provincial and district level moral and material support.

- viii) **Youth Development Workers:** Similarly, youth development workers will be trained and mobilized to help professionals in the communities in which they are based e.g. teachers, social workers, workers involved in women's development, drug education project workers health care workers, and so on. The Youth Development Workers would not see their role as working with youth in isolation, but rather to assist the community's own responsibility towards its young, and young people's responsibility towards its community. The Youth Development Worker will provide the focus on young people's needs in the community, and is able to bring to bear appropriate resources to meet those needs. The trained youth workers will perform the following duties:
 - (a) To build community networks and supports amongst concerned organisations, institutions, leaders and renowned individuals, which will assist youth development in the community;
 - (b) To work with young people through discussion, brain-storming, information meetings, to gain a sense of youth needs and aspirations, and to work towards the involvement of youth itself in the local structures.
- ix) **Youth Award Scheme:** A youth award scheme will be started to promote community service by young people, physical fitness and adventure, national cultural awareness and constructive leisure time activities. The Award Scheme will be managed by Youth Affairs Division, and Provincial Governments through the NGOs, schools and colleges.

Management Issues

29. The Culture, Sports, Tourism and Youth Sector is a combination of four sub-sectors which are dealt under different Ministries and Divisions. These Ministries have a weak coordination structure thereby resulting in duplication of schemes by the provincial governments. During the 7th Plan period an ambitious programme was framed for various sub-sectors of CSTY, which has not been implemented fully. The sector comprises of large number of small size schemes. The approval of such small schemes has been given by the DDWP without taking into consideration their financial, and economic viability and relationship with the overall development charter of the plan. Another obstacle was initiation of various small projects at the same time due to which most of them have remained incomplete.
30. Duplication of schemes under youth and other programmes is another cause which hampered the effective implementation in this sector. The boundaries between Youth, Education, Women and Manpower programmes need to be defined.
31. The Youth Sub-sector has also faced a setback during the plan period. The allocation of Rs 500 million for implementation of development projects under 'Youth Policy 1990' was frozen due to resource constraints and lack of viable portfolio of approved projects. Skill

development projects for youth, which were due to be transferred to provincial government after the expiry of agreed time of three years, could not be transferred due to un willingness of provinces. During 1993-94 no funds have been provided to these centres.

32. The Pakistan Tourism Development Corporation is chiefly instrumental for launching tourism Development activities under federal programme. It has, during the 7th Plan, established a number of motels and road side facilities at various places throughout the country. The Corporation needs to function on commercial lines by selecting viable projects to be established on self financing basis. It should also launch publicity campaign to promote tourism in the country. The Corporation may also function as a catalyst to the promotion of Tourism Industry in the private sector.

Targets and Allocation

33. The Eighth Plan allocation for Federal Programme of the CSTY sector amounts to Rs 2563 million, which is double of the 7th Plan revised estimates. Out of this allocation i.e. Rs 1090 million will go to Tourism sub-sector. The distribution among ongoing and new programmes is Rs 697 million and Rs 1865 million respectively. Statistical Appendix Table-III-14.1 shows the sub-sector wise details of 8th Plan development outlay. Sub-sectoral position is given below:

Tourism

34. Following physical targets have been set for tourism sub-sector:

- i) The tourist arrivals are targeted to increase by 200 per cent during the Plan period, from 0.391 million in 1992 to 1.175 million in 1998, in response to major structural changes and a favourable policy package. Similarly, the foreign exchange earnings from tourism sector will record an increase of 513 per cent during the same period, from a level of \$ 163 million in 1992 to \$ 1 billion in 1998.
- ii) The sector will provide additional job opportunities to 6.2 lakh persons by 1998, from a level of 5.44 lakh employed in 1992 to 11.60 lakh in the terminal year of 8th Plan.
- iii) The targeted revenues generated by the sector are Rs 3.709 billion during the 8th Plan period, registering an increase of 113 per cent over the 1992 benchmark of Rs 1.740 billion.
- iv) The tourism related activities are projected to contribute Rs 30.999 billion to GNP in 1998, compared to Rs 14.504 billion in 1992, a growth of 113 per cent over the Plan period.
- v) An additional 100,000 hotel rooms and 7.98 lakh restaurant seats will be made available during the Plan period by the hotel industry.

35. The allocation for public sector programmes add up to Rs 1090 million. This includes Rs 215 million for ongoing schemes and Rs 875 million for new initiatives to achieve the targets fixed by the Government for the 8th Plan. The funding and budgeting of economic and social infrastructure will be made by the concerned agencies at the federal and provincial level on priority basis.

Culture & Archeology

36. The total allocation for archaeology amounts to Rs 550 million, including Rs 253 million for on-going programmes and Rs 297 million for new programmes. For Culture sub-sector an amount of Rs 204 million is earmarked in 8th Plan.

Sports

37. The financial allocation for sports development is estimated at Rs 456 million, including Rs 418 million for new programmes and Rs 38 million for the on-going schemes.

Youth Development

38. The federal public sector youth development allocation is estimated at Rs 263 million comprising ongoing programmes of Rs 93.340 million and new programmes of Rs 170 million.

III-15

MASS MEDIA

The role of mass media as catalyst for change and advancement is universally accepted. Media has a supportive role in economic development, social change, education, modernisation and environmental improvements.

2. Pakistan has made some headway in the development of mass media, particularly in the fields of print and electronic media. The television signals now reach 89% of population and radio transmissions cover 95% of the entire population. The recent revolution in satellite broadcasts in the south asian region has also reached Pakistan, when a link up Asia sat was accomplished in January 1992.

3. The physical infrastructure of audio and video media in Pakistan needs rehabilitation and consolidation. This will be done by the process of balancing and modernisation of equipment in phases. The replacement of old and obsolete equipment with new and modern equipment will ensure the smooth broadcast of Radio Pakistan signal without interruption and interference.

4. By the introduction of equipment based on modern technology the efficiency and quality of the broadcast will improve. The listeners will enjoy un-interrupted and high quality sound programmes of their taste.

5. The future expansion of TV signal would be in hilly, thinly populated and scattered areas of Balochistan, NWFP, Azad Jammu & Kashmir, Northern and Tribal areas. The expansion of TV signal in these areas based on the conventional microwave net-work and off air reception is highly un-economical besides being time consuming. It is planned to switch over to satellite broadcasts during the Eighth Plan.

Policy Initiatives

6. The international television broadcasts received through dish antenna coupled with increasing private sector presence in this field is considered as a challenge and a welcome phenomenon because it will help improve the quality and quantity of service of the public sector electronic media. These have to be compatible with international standards in terms of professional approach and technological sophistication, which needed to be used to promote cultural identity and national integration. The public sector mass media has no option but to prepare for domestic commercial challenges and threats of cultural invasion and disinformation pouring from across the oceans through communication satellites. The Eighth Plan policy objective for mass media include streamlining the physical facilities and the contents of mass media programmes to make them consistent with the aspirations of the people.

7. The Eighth Plan will promote private sector participation in the establishment and operation of radio stations and TV channels. As a first step private sector will be encouraged to set up local/city radio stations under a license or contract arrangement with FM/VHF

transmitters having a 40-50 KM coverage range. This will not only help improve the quality of the PBC programme fare but also promote a healthy sense of competition.

8. The private sector will be allowed to establish their own TV broadcast facilities for sports and entertainment on appropriate terms of licensing.

9. To make media capable of addressing these problems a modernized broadcasting system is imperative. To equip the mass media with modern technology and professional excellence, funds will be provided to update the physical infrastructure of radio, TV and the press. During the Plan period a 2 pronged approach will be applied to make media products and service consistent with the aspirations of the people and to develop the technological base of media so as to allow a harmonious growth both in public and private sectors.

Management Issues

10. Mass Media Sector has faced a big resource crunch particularly in terms of Radio Broadcasting. The overall progress made during the 7th Plan period has been inadequate. The area and population coverage during the plan period has not increased according to the target. 100% population coverage in T.V. transmissions is yet to be achieved.

11. For the Pakistan Broadcasting Corporation 7th Plan allocated Rs 626 million and the agencies could utilise only Rs 220.95 million. A Gigantic project of broadcasting House Karachi was initiated during the 7th Five Year Plan period but inadequate allocation have hampered physical progress. So far only Rs 36.718 million have been spent against the total cost of Rs 98.5 million. This means only for this project an allocation of Rs 13 million per annum will be required during the Eighth Plan period. Similarly 100 KWMW transmitters at Peshawar, Karachi and Rawalpindi would need sizeable amount of money to touch the completion stage. Out of this, 100 KWMW transmitters Peshawar and Karachi were initiated during the 6th Plan period.

12. PTV has however met its target during the 7th Five Year Plan but the rebroadcast centres at Leiah, Parachinar and Loralai are incomplete. But they need small amount of money to get through. PTV also spent Rs 519 million on replacement of old equipment through its own resources.

13. During the 7th Plan PTV faced a number of challenges in terms of Private Broadcaster's arrival, foreign transmissions through satellite and availability of CNN news channel to the Pakistan Audience. It has not been able to cope with the technological revolution made in the TV transmission sector worldwide. This has badly hampered its credibility, reach and programme content development. Its viewers have been lured by other broadcasters in the neighborhood.

14. The 2nd TV channel was introduced during the 7th Five Year Plan period which was first welcomed as the pioneer channel of satellite broadcasting in Pakistan but due to limitation in programmes contents, and concentration on less entertaining areas, repetition of PTV news,

current affairs and entertainment programmes, its impact remains insignificant. Virtually the viable TV broadcasting is still missing satellite facilities.

15. The Associated Press of Pakistan was allocated Rs 19.8 million for construction of its Headquarters building at Islamabad which has made some progress during the last year of the 7th Five Year Plan, but the scheme has been carried to Eighth Plan.

Landmarks of Eighth Plan

16. The Eighth Plan will aim at achieving the following:-

- Introduction of satellite transmission in television broadcasting.
- Expansion of 2nd television channel to the left out pockets of the country including Balochistan, Azad Kashmir and northern areas.
- Provision of educational broadcasts for 5-6 hours a day.
- Increasing the range of radio broadcasts to Middle East, Gulf and Central Asian regions.
- Switching over to computer news transmission for the benefit of print media.
- Provision of fora for the pressmen for their outdoor professional activities, like press clubs at the national level.
- Encouraging TV programme production and transmission in the private sector.

Eighth Plan Targets and Allocations

17. The television sub-sector will launch development programmes costing Rs 1.078 billion. The Corporation will complete its ongoing rebroadcast centre at Landikotal. Efforts to provide best TV service and signals to Azad Kashmir will be accelerated by establishing a TV centre at Muzaffarabad. During the Eighth Plan period, 15 new low power boosters and 2 rebroadcast centres at Mianwach and Maiwand will be established besides 7 other rebroadcast centres at a cost of Rs 418 million. The PTV has planned to fabricate 5 mini O.B. vans for its news gathering system. This facility will enable the PTV to speed up its existing news gathering system and enlarge the scope of coverage, through on the spot relay of the events. During the plan period phase-II of the 2nd channel will be initiated which will increase the transmission of this channel to 10 hours a day. The PTV will also undertake the exercise to replace its outdated studio equipment at various stations.

18. In the Eighth Plan, radio broadcasts will be strengthened by (i) improving the quality of medium wave signals and introducing FM service and (ii) by establishing powerful shortwave

transmitters in place of outdated ones to cater to the needs of far flung areas and reach the people across the borders in Middle East and the central asian republics.

19. During the Eighth Plan period, the PBC will install one powerful 100 KWSW transmitter and aerial system at Peshawar at a cost of Rs 185 million which will enable our media reaching to central Asia through radio broadcasts. Similarly, a 1000 KWMW transmitter for Gulf and Middle East costing Rs 280 million will be set up at Karachi. The corporation also plans a comprehensive replacement exercise, under which the Audio equipment at broadcasting houses, Islamabad, Lahore and Multan will be installed while two 50 KWSW transmitters and aerial system by two 100 KWSW transmitters will be replaced at a cost of Rs 350 million. The new initiatives and completion of ongoing schemes will enable PBC to fulfill the national objectives of reaching the maximum audience at home and abroad.

20. A net work of programmes on TV and radio was designed to inculcate awareness among the mass on various social issues. Apart from daily Jingles/spots being projected through TV/Radio a number of promotional TV programmes, such as interviews of popular figures, discussion forums, short and long duration dramas etc. are being produced in collaboration with the Ministry of Information and Broadcasting in pursuance of the directive of the Prime Minister.

21. During the Plan period radio and television will extend TV signal to Balochistan and Azad Kashmir and programme design attuned to enhance the self esteem of the poor, increase their motivation for self help, and alter their cognitive structures and promote local participation in determining the control of local radio stations (and possibly even of television). The thrust of the media during Eighth Plan period will be on education, motivation and to create a balance in promoting the national integration.

22. An amount of Rs 1383 million has been allocated for ongoing and new schemes of PBC. Out of this, Rs 296 million will be spent on completion of ongoing schemes of 7th Plan. For the development schemes of Television Corporation a sum of Rs 1078 million has been allocated out of which Rs 56.50 million will be spent on the on-going projects.

23. The APP will get Rs 29 million for switching over to a computerized system of news transmission and construction of headquarter building at Islamabad. A block allocation of Rs 12 million has been earmarked for national debate on Eighth Plan.

24. A total allocation of Rs 2502 million is proposed for various development programmes of the public sector media agencies. In addition PTV is likely to invest Rs 234 million from self financing. The total size of the sector includes Rs 371 million for ongoing schemes and Rs 2130 million for new programmes of expansion and modernisation. Agency wise details are given in Statistical Appendix Table-III-15.1.

III-16

DEVELOPMENT OF SOCIAL AND ECONOMIC STATISTICS

There has been significant development in the field of statistical theory, its application and management in the last few decades. The use of statistics in analysis, forecasting, planning and decision making has increased tremendously. The statistical organizations throughout the world devote considerable time, resources and expertise towards the compilation, processing and presentation of socio-economic statistics and construction of relevant, timely and adequate indicators to meet the requirements of planners, policy makers and researchers. One of the most powerful stimuli to the development of statistics in developing countries, has been the increase in the speed and spread of development planning in these countries. The efforts at the national level are further supplemented by the international development agencies by way of providing guidelines, manuals, equipments and training facilities through expert advisory services and organising technical meetings and seminars.

2. In Pakistan some notable strides have been made in the field of statistics. Although the prevalent statistical system in Pakistan is well developed, managed and organized, yet its capability to meet the full and growing data requirements of the users still needs to be improved. The statistical series so far developed are not comprehensive enough as required by the planners, researchers and decision makers. Special attention needs to be given to improving the quality and coverage of statistics relating to population, accounts, savings and investment, employment, social and other sectors.

Improvement in Statistics During Eighth Plan

3. The statistical system evolved in Pakistan is both centralized as well as decentralized and thus has all the limitations with such a system. The major limitations of the present system which need indepth review are:

- i) In-house inability to identify weakness of the system and develop desired analytical capability to bring about improvements in the quantity, quality, timeliness and comparability of data at national and international level in the light of latest theoretical and methodological developments.
- ii) Lack of requisite interaction between the policy makers, users and producers of data.
- iii) Ineffective and inefficient institutional arrangements particularly at provincial level for collection, compilation, publication and dissemination of data.
- iv) Lack of awareness and proper recognition of importance of statistical data.
- v) Inadequate career planning of statisticians.

- vi) Lack of resources to develop electronic data capability.

4. All these issues will be addressed in the Eighth Plan. However the main objectives of statistical development programme will be to promote the overall National Statistical Capability through improvement in statistical management, career planning, survey methodology, introduction of innovatives, concept and techniques of data collection, processing and promotion of inter-action between the producers and users of statistics. Some of the major objectives will be to:

- meet the growing needs for up-to-date informations of users, by reducing the timelag;
- formulate an agreed plan of activities, its frequency, priority and allocation of agency responsibility;
- promote, coordinate and manage the statistical development activities;
- standardize the definitions and concepts of various socio-economic indicators;
- improve the quality and representativeness of data, particularly collected through Sample Surveys;
- reduce time lag, duplication and overlapping;
- to develop in line with latest UN-SNA to meet the requirement of planning, policy decision making and economic analysis.

5. For the attainment of above objectives greater reliance will be placed on coordination, research, training and management across the areas of concerns, on the institutional front, the National Statistical Council and its subsidiary Bodies will be reactivated, frequencies of regular meetings between the federal and provincial statistical authorities will be increased, the present set up in the Statistics Division and Provincial Bureaus of Statistics and other Cells will be reviewed, reorganized and strengthened and all surveys plans, sampling frame, proformas and questionnaires will be standardized and their scrutiny and clearance at the federal level (Statistics Division) made mandatory.

6. The main statistical law which presently provide statutory basis for the collection of data are:-

- i) General Statistics Act, 1975
- ii) Agriculture Census Act, 1958
- iii) Census Ordinance, 1959
- iv) Industrial Statistics Act, 1942

7. All these laws will be reviewed in the light of past experience and made compatible with present situation to ensure collection of accurate information and clear-cut delineation of areas of jurisdiction of different agencies.

Population Statistics

8. The Civil Registration System of Pakistan presently in vogue has failed to provide regular flow of accurate data on death, births etc. As a stop gap arrangement Demographic Surveys are conducted annually to provide much needed information on population growth during intercensal period. The system will be reviewed critically to identify its inherent weaknesses and appropriate remedial steps be taken.

National Accounts

9. The national accounts of a country are designed to present the quantitative picture of the economy over a period of time covering production, consumption, investment and transactions with rest of the world. Considerable progress has been made in the field of national accounts all over the world. During the Eighth Plan the coverage of the existing series will be extended to cover subjects like input-output tables, social accounting matrices, flow of funds and institutional sector accounts on regular basis. The first set of these accounts is likely to be available for the year 1984-85. Similar series on continuous basis would be available in the year 1994-95. Besides, the base year of the current series will also be changed from 1980-81 to a more recent suitable year.

10. In addition to regular surveys/case studies, a number of new surveys and case studies will be initiated to supplement the existing series. A list of the important surveys/studies proposed to be conducted during the Eighth Plan is given in Statistical Appendix Table-III-16.1.

Sampling

11. Developing of a sampling frame is of basic importance to determine the quality and representativeness of data eventually collected through Sample Surveys. Presently, rural areas are not given due weight. Certain surveys are frequently required but they are either non-existent or are not repeated for comparison of results. A considerable deficiency in the system's survey scheme is that no proper treatment is given and published to the subject of sampling and non-sampling errors which is very much desirable. For the improvement of sampling frame it is proposed to:

- a) Update the multipurpose sampling frame developed by FBS regularly, making use of Census of Establishment in addition to other sources.
- b) Construct the sampling frame catering to the needs of both urban and rural areas.
- c) Develop and integrate a master sample, both for the agricultural and the non-farm establishments.
- d) Extend the surveys to Azad Jammu & Kashmir and FATA also.

- e) Repeat important surveys so as to make comparison of trends, and
- f) Give proper treatment to sampling and non-sampling errors.

Price Statistics

12. Price Statistics are envisaged to be further improved by introducing new weights on the basis of latest Family Budget Survey results and development of new indices like Producers Prices and Wage Rates by occupation and by industrial groups.

Agriculture Statistics

13. In the field of crop statistics, subjective method of estimation will be replaced by the objective sample survey. Master integrated Sample Plan for 18 crops developed by FBS will be introduced in all the provinces. An independent Directorate of Crop Reporting Services may be created in each province on the pattern of one already created in the Punjab.

14. FBS is running a very comprehensive programme on the development of agriculture statistics developing a well planned survey scheme for selected major crops based on Area Sampling Frame. Results are expected by 1994 for wheat. After the successful implementation of this scheme, the same will be extended to other major crops in a uniform phased programme in the provinces so that the pace of development is maintained simultaneously. This scheme will run parallel to the present system for couple of years and a decision to discontinue the old system will be taken after the new system is finally established and found useful.

Manufacturing

15. The importance of manufacturing statistics has further enhanced in the wake of privatization policies of the government. It will be ensured that the coverage of CMI, computation and presentation of tables are of improved quality and published with a minimum time lag. Likewise, for the improvement of data on small scale industries, a quinquennial census with intervening annual surveys will be taken up. The Federal Bureau of Statistics has already introduced ISSMI-Integrated Survey of Services and Manufacturing Industries (Large and Small, both) results of which would be available shortly. Annual surveys of this kind would provide useful data for estimation of value added to supplement the quantum index approach. The quantum index of manufacturing (QIM) will be improved in terms of coverage and methodology with revised base and inclusion of items by variety and specification. Value index would also be constructed and made available simultaneously.

Other Sectors

16. With a view to improving the coverage of statistics on other sectors, the directories of establishment in mining, transport, construction and all such activities will be prepared and updated frequently. The collection of social statistics will be given special importance. New areas of environment and ecology will be dealt with adequately. These are the areas which have been neglected in the past, but have assumed importance now affecting outlook and policies.

17. Statistical series on trade and industries would be made as close to international classifications (ISIC and SITC) as possible. Related indices will also be shifted to new base year as in national accounts.

18. Environmental problems and concerns are likely to receive more attention during the Eighth Plan. Demand would inevitably flow for information from different quarters to assess the environmental conditions and to monitor the impact of policies. The environmental statistics is a complex field and will require special methodological work to be initiated during the 8th Plan.

Statistical Training

19. Statistical Training for human resource development is one of the important components of statistical capability development. Therefore, the enhancement of technical skills of the professional statisticians in the theoretical and practical fields is of basic importance. To keep them abreast of the latest techniques, methods and advancements in the subject, proper methodological training of the working statisticians in federal and provincial departments will be provided. Training of personnel working in provincial departments and statistical cells elsewhere will be given due preference. Pakistan Institute of Statistical Training and Research at Lahore will be assigned to chalk out a comprehensive training programme and circulate to all concerned. The training facilities will be opened to universities, business institutions and private sector as well.

Organization

20. It is imperative that concerned departments take stock of their activities and the available manpower resources so as to ensure maximum efficiency. Women participation in the survey work related to women in particular will be encouraged. Each department where economic data is generated would be expected to establish statistical units to generate proper statistical data. Such cells will also help in conducting surveys and carrying out case studies. Statistics Division will, however, play its coordinating and monitoring role in this respect.

21. Apparently it seems that the whole system revolves around activities other than those of Agriculture Census and Population Census Organizations. It should be noted that this impression is an imprint of the fact that the activities of these units are of static nature taking birth at fixed periods only and are absorbed in different uses. It is expected that the system would fully and effectively utilize and coordinate the various activities of the component units.

22. In drawing conclusion at national levels, for example conducting important censuses and surveys, it may be imperative to associate the private sector also. This participation may produce better and positive results.

Career Planning

23. The Statisticians in Pakistan do not belong to any regular cadre. Uncertainty of prospects frustrate the legitimate aspiration and adversely affect the quality and efficiency of the service personnels. The demand to induct statisticians into a regularly constituted cadre is a genuine and

deserves due consideration. Suitable incentives need to be offered to the statisticians. Formation of a statistics group at the federal level in the initial stage, followed by the provinces on similar lines will be examined and given due consideration during the plan period.

Electronic Data Processing

24. Presently a big network of computer facilities is available with FBS. Sufficient facilities have been made available at provincial headquarters too. Statistics Division will assess the total requirements and with proper monitoring provide computer facilities to provincial departments also. Well coordinated efforts will ensure much more flow of statistical data at different levels.

Allocation of funds

25. For the development programme of statistics, the Eighth Five Year Plan provides for an outlay of Rs 551 million (at 1992-93 prices) under the federal development programme. The major components of development expenditure include the construction of office buildings, electronic data processing, computerization of national accounts and collection of statistics. The Provincial Statistical Development Programmes, however will be financed out of the Provincial Outlays. The details of programme by activities are shown in the Statistical Appendix Table-III-16.2.

Landmarks of Eighth Plan (1993-98)

I - Plan Size

	<i>(1992-93 Prices)</i>		<i>(Billion Rupees)</i>
	Public Sector	Private Sector	Total
7th Plan	553	596	1149
8th Plan	752	949	1701
Acceleration (%) (Real Terms)	36	59	48

Public Sector Programme

	<i>(Billion Rupees)</i>		
	Budget	Corporate and Market Financed	Total
7th Plan	457	96	553
8th Plan	483	269	752

II- Growth Targets

GDP	7.0%
Agriculture	4.9%
Manufacturing	9.9%
Services	6.7%

III - Macro-economic Management

1. Achieve the growth targets in a framework of equity, stability and sustainability.
2. Reduce overall fiscal deficit to half - from 7.9%* of GDP to 4% of GDP.
3. Reduce current account deficit from \$ 3.7* billion to \$ 1.84 billion -from 7% of GDP to 2.4%.
4. Long-term external debt to remain at 36% of GDP. Monetary expansion below growth of nominal GDP.
5. Retirement of high cost debt by utilization of privatization proceeds.
6. Introduce legislative control on budget deficit.
7. Reduce inflation rate from 9.3% to 6%.
8. National savings to GDP ratio to rise from 13.6% to 18%.
9. Generate 6.2 million new jobs (against 3.2 million in Seventh Plan).

*1992-93 actuals. In the Plan normalized benchmarks for 1992-93 are used.

IV - Good Governance

1. Reduce imbalances of regions, gender, groups, classes.
2. Measures for poverty alleviation:-
 - Long term - through Social Action Programme and employment generation.
 - Short term - through specific relief under Zakat, Baitul Maal and Social Welfare Systems.
3. Ensure equality of opportunity through merit, transparency, access to education, access to health care, employment (particularly self employment) and vertical mobility.
4. Greater self-reliance in financial resources.
5. Mitigate the heritage of collusion and default, conspicuous consumption and drug addiction
 - Decisive action against defaulters of tax, bank loans, and utility bills.
6. Improve efficiency, responsiveness and participation in the management of the economic system, through deregulation, accountability and empowerment of the rural communities, NGOs and lower echelons of Government.
7. Promote:
 - Public - Private Partnership
 - Devolution and decentralization particularly to the district level.

V - Towards Competitive Markets

1. Lower tax rates and broaden tax base, ensure documentation of the economy, improve tax compliance.
2. Curtailment of special concessions and rent-seeking activities.
3. Lower tariff structure, and integration with the World economy.

VI - Private Investment

1. Improve enabling environment through
 - adequacy of services and physical infrastructure
 - education and training
 - better health coverage
 - strengthening of capital markets
 - deregulation and privatization
2. Supportive policies in the fiscal, monetary, foreign exchange and trade regimes.
3. Ensure a minimum investment of Rs. 949 billion against Rs. 596 billion in the 7th Plan (1992-93 prices).

59% acceleration in real terms.

VII - Sectoral Targets

Social Sectors

Education and Training

1. Breakthrough in primary participation rate:-
Boys from 85 % to 95 %.
Girls from 54 % to 82 %.
2. Increase literacy rate from 35 % to 48 %.
3. Output of technicians to increase by 50% - from 85,000 to 127,000 per annum.
4. Qualitative improvement in the education system.

Health

1. Engage 33,000 village health workers - First major effort for health extension at the village level.
2. Full immunization of mother and child.
3. Coverage of preventive services to be raised from 80 % to 90 %.
4. Life expectancy to go up from 61.5 years to 63.5 years.
5. Infant mortality rate to decline from 8.6 % to 6.5 %.
6. Control of micro-nutrient deficiencies.
7. Reduction of incidence of low birth babies from 25 % to 15 %.
8. Universal access to iodized salt for edible purposes.

Population

1. Population Planning coverage to increase from 20% to 80%.
 - urban 54% to 100%
 - rural 5% to 70%
2. Contraceptive prevalence to be doubled - from 14% to 28%.
3. Population growth rate declines from 2.9% to 2.7%.

Rural Water Supply & Sanitation

1. Coverage of rural water supply to increase from 47% to 71% of population.
2. Rural sanitation coverage to go up from 14% to 32%.

Physical Infrastructure***Water***

1. Complete Chashma Right Bank Canal.
2. Complete Pat Feeder Canal.
3. Complete Left Bank Outfall Drain.
4. Visible Progress on Right Bank Outfall Drain.
5. Water logging in the disaster areas to be eliminated (1.40 million hectares).

Energy

1. Construction of Ghazi Brotha Hydel Power Project (1450 (MW).
2. Thermal generation in private sector (All new projects - estimated capacity 2500 MW).
3. Completion of ongoing Hub Power Project in private sector (1290 MW).
4. Privatization of thermal plants of WAPDA.
5. Power generation capacity up by 68% (from 9786 MW to 16422 MW).
6. Oil production up by 106% (from 60000 to 123,300 barrels a day) with major investment expected from private sector.
7. Gas production up by 38% (from 1855 to 2554 MMCFD peak).
8. Refining capacity up by 183 percent (from 6 million to 17 million tons per annum).
9. Significant utilization of Thar Coal. (Total estimated deposits: over 100 billion tons)
10. Electrification of 19700 villages.

Transport & Communication

1. Double rail track from Lodhran to Peshawar (800 Kms).
2. Manufacture of 1367 High Capacity Wagons.
3. Complete Indus Highway (1189 Kms).
4. Complete dualisation of National Highway (N-5) (1764 Kms).
5. Complete Lahore - Islamabad Motorway.
6. Improvement and upgradation of RCD Highway (N-25 and N-40).
7. Initiation of work on Makran Coastal Road.
8. Construction of deep sea port at Gwadar through Private Sector.
9. Clear all pending demand for telephone connections (2.5 million new lines - depicting 125% increase in telephone access).
10. Number of post offices to rise from 13513 to 18513.
11. Work on Lowari Tunnel will be initiated.

Production Sectors

Agriculture

A: Policies

1. Integrated management of agriculture, irrigation and drainage.
2. Shift of emphasis to resource use efficiency - particularly input management and research linkages. Enhancing crop production by improving efficiency of inputs and research.
3. Better soil management, improved response to fertilizer use.
4. Introduction of sprinkler and trickle irrigation.
5. Breakthrough in oil seeds and pulses.
6. Integrated Pest Management.
7. More emphasis on non-crop sector.
8. Establishment of Kisan Banks.

B. Production Targets

- Wheat production up by 22% (from 15.0 million tons to 18.25 million tons).
- Cotton production up by 61% (from 9.3 million bales to 15 million bales).
- Rice production up by 31% (from 3.25 million tons to 4.25 million tons).
- Sugarcane production up by 28% (from 36 million tons to 46 million tons).
- Non conventional oil seeds production up by 108% (from 120 thousand tons to 250 thousand tons).
- Meat production up by 38% (from 1.8 million tons to 2.5 million tons).
- Milk production up by 30% (from 17 million tons to 22 million tons).

Industries and Minerals

Policy Initiatives

1. Breakthrough in small scale sector and improving linkage will large scale sector.
2. Major shift to value-added products. Improved production quality and marketing.

Production Targets

- Fertilizer (Nitrogen) production up by 60% (from 1.23 million N.Tons to 1.97 N.Tons).
- Cement production up by 66% (from 8.56 million tons to 13 million tons).
- Sugar production up by 54% (from 2.4 million tons to 3.7 million tons).
- Petroleum products up by 50% (from 7.6 billion litres to 11.4 billion litres).
- Steel Billets production up by 124% (from 246 thousand tons to 550 thousand tons).
- Tractors production up by 137% (from 712 thousand to 1686 thousands tons).
- Bicycles production up by 61% (from 5.8 million to 9.3 million).
- Trucks and buses up by 100% (from 4000 to 8000).
- Saindak Copper Project would be in production. Capacity 15850 tons of blisters copper, 1.47 tons gold and 2.76 tons of silver.

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Table-I-2.1

Major Economic & Social Indicators: Perspective Plan

	1992-93	1997-98	1998-03	2003-8
I. Gross Domestic Product (at 1992-93 prices)				
--GDP growth rate (% p.a)	6.2	7.0	7.0	7.0
--Per Capita Income Growth Rate (%p.a)	3.1	4.1	4.2	4.3
--Composition of GDP (% Shares)				
- Agriculture	24.5	22.1	19.6	17.1
- Manufacturing	17.6	20.3	22.7	25.1
- Others	57.9	57.6	57.7	57.8
II. As % of GDP at Market Prices				
- Investment	20.0	22.6	20.0	21.4
- Foreign Savings	4.4	2.1	0.7	0.0
- National Savings	15.6	20.5	19.7	21.4
- Exports	14.2	16.9	18.7	18.3
- Imports	18.3	16.6	15.6	14.4
- Current Account				
III. Social Indicators (%)				
- Population Growth Rate	2.96	2.75	2.69	2.3
- Unemployment Rate	5.7	2.0	2.0	2.0
- Primary Enrolment (Million)	12.4	18	22	23
Boys	7.8	10	12	12
Girls	4.6	8	10	11
- Literacy Rate (%)	35	48	70	87
Male	47.3	61.5	84	95
Female	22.3	33.5	49	80
- Access to Potable Water				
% of Rural Population	47.1	70.5	80	85
% of Urban Population	70.5	95.0	97	99
- Access to Sewerage				
% of Rural Population	13.5	31.5	55	75
% of Urban Population	60	80	85	90
- Population Per Hospital Bed	1598	1434	1000	1000
- Life Expectancy (Year)	61.6	63.6	65.5	67
- Infant Mortality				
(Age-0-1) Per Thousand	86	65	40	30
- Density of Telephone per 1000 Pop.	20.6	35.6	56.8	91

Table-I-3.1
Macroeconomic Framework
(At 1992-193 Prices)

	1992-93		FIVE	<i>(Rs. Billion)</i>
	BENCH MARK *	1997-98	YEARS	ANNUAL
			TOTAL	GROWTH
				RATE
GDP (fc)	1231.8	1727.7	7579.6	7.0
Indirect Taxes (Net)	157.0	248.8	1040.8	9.6
GDP (MP)	1388.8	1976.5	8620.4	7.3
Net Factor Income from abroad	4.6	-18.2	-42.5	--
GNP (MP)	1393.4	1958.3	8577.9	7.0
External Resource Inflow (Net)	60.7	42.3	256.4	-7.0
Total Resources/Uses	1454.1	2000.6	8834.3	6.6
Total Consumption	1176.3	1553.2	7007.7	5.7
Total Investment	277.8	447.4	1826.6	10.0
Fixed Investment	256.7	418.0	1697.8	10.2
Public	121.9	185.4	749.4	8.7
Private	134.8	232.6	948.4	11.5
Changes in Stocks	21.1	29.4	128.8	6.8
Memo Items:				
AS % of GDP				
Investment	20.0	22.6	21.1	
Fixed Investment	18.5	21.1	19.7	
Public	8.8	9.4	8.6	
Private	9.7	11.8	11.1	
External Resource	4.4	2.1	3.0	
National Savings	15.6	20.5	18.2	
Domestic Savings	15.3	21.4	18.5	
Marginal Rate of Savings				
National			27.2	
Domestic			35.4	
ICOR			3.2	

*As 1992-93 was not a normal year by any standard, therefore, in most of the cases the benchmark differs from actuals.

Table-I-3.2**Development Outlay
(% Share)**

SECTOR	Public	PRIVATE	TOTAL
Agriculture	1.15	7.89	4.90
Minerals	0.90	0.42	0.63
Industries	0.36	38.51	21.64
Water	8.24	1.68	4.58
Fuel & Power	39.56	14.13	25.38
Transport & Communications	18.10	19.51	18.89
Physical Planning & Housing	2.71	11.60	7.67
Education and Training	7.39	0.25	3.41
Health and Nutrition	3.88	0.70	2.10
Population Planning	1.19	0.16	0.64
Others	16.66	5.15	10.18
Total Outlay	100.00	100.00	100.00

Table-I-4.1
Public Finance - Consolidated Budget
(At constant 1992-93 prices in Billion Rs.)

	BENCH MARK 1992-93	TERMINAL YEAR 1997-98	TOTAL 1993-98	GROWTH RATE (%)
GOVERNMENT REVENUES	241.45	429.63	1703.41	12.22
TAX RECEIPTS	180.80	327.82	1293.08	12.64
Direct Taxes	36.99	64.58	258.62	11.79
Income Tax	33.99	55.49	224.13	10.30
Others	3.00	9.09	34.48	24.82
Indirect Taxes	143.81	263.24	1034.46	12.85
Customs	65.65	69.78	344.82	1.23
Excise Duty	36.02	66.90	258.62	13.18
Sales Tax	23.98	98.53	301.72	32.66
Surcharges	12.84	15.95	86.21	4.43
Others	5.32	12.08	43.10	17.82
NONTAX RECEIPTS	59.05	101.81	410.34	11.51
Sale Proceeds Allocated For S.A.P.	1.60			
GOVERNMENT EXPENDITURES	336.45	512.24	2137.54	8.77
CURRENT	266.55	391.11	1654.24	7.97
Government Administration	36.05	40.83	198.27	2.52
Defence	87.44	106.63	474.13	4.05
Social Services	38.07	63.69	258.62	10.84
Subsidies	7.31	4.56	25.86	-9.01
Interest	78.78	125.27	534.47	9.72
Domestic	57.86	100.55	431.03	11.69
Foreign	20.92	24.73	103.45	3.40
Others	18.90	50.12	162.89	21.54
DEVELOPMENT	69.90	121.13	483.32	11.62
OVER ALL FISCAL DEFICIT	95.00	85.43	434.10	-2.10
FINANCING	95.00	85.43	434.10	-2.10
Non-bank Borrowing	25.43	30.88	164.40	3.96
Bank Borrowing	45.20	25.45	139.00	-10.85
External	24.37	29.09	130.73	3.60
GDP at Constant Prices	1388.80	1976.50	8620.40	
As % of GDP				
GOVERNMENT REVENUES	17.39	21.74	19.76	
TAX RECEIPTS	13.02	16.59	15.00	
Direct Taxes	2.66	3.27	3.00	
Income Tax	2.45	2.81	2.60	
Others	0.22	0.46	0.40	
Indirect Taxes	10.35	13.32	12.00	
Customs	4.73	3.53	4.00	
Excise Duty	2.59	3.38	3.00	
Sales Tax	1.73	4.99	3.50	
Surcharges	0.92	0.81	1.00	
Others	0.38	0.61	0.50	
NONTAX RECEIPTS	4.25	5.15	4.76	
Sale Proceeds Allocated For S.A.P.	0.12	0.00	0.00	
GOVERNMENT EXPENDITURES	24.23	25.92	24.80	
CURRENT	19.19	19.79	19.19	
Government Administration	2.60	2.07	2.30	
Defence	6.30	5.39	5.50	
Social Services	2.74	3.22	3.00	
Subsidies	0.53	0.23	0.30	
Interest	5.67	6.34	6.20	
Domestic	4.17	5.09	5.00	
Foreign	1.51	1.25	1.20	
Others	1.36	2.54	1.89	
DEVELOPMENT	5.03	6.13	5.61	
OVER ALL FISCAL DEFICIT	6.84	4.32	5.04	
FINANCING	6.84	4.32	5.04	
Non-bank Borrowing	1.83	1.56	1.91	
Bank Borrowing	3.25	1.29	1.61	
External	1.75	1.47	1.52	

Table-I-5.1

8TH PLAN ALLOCATIONS

(Billion Rupees)

Secotrs	Budgetary Allocations	Non-Budgetary Allocations	Total 8th Plan
<u>FEDERAL</u>			
Agriculture	5.17		5.17
Fertilizer Subsidy	0.50		0.50
Industries	0.34	1.52	1.86
Minerals	6.63		6.63
Water	55.57		55.57
Power	34.02	178.63	212.65
Fuels	10.82	78.56	89.38
Transport & Communications	120.47	10.10	130.57
Physical Planning & Housing	6.81		6.81
Rural Development	3.12		3.12
Education & Training	6.95		6.95
Health and Nutrition	5.15		5.15
Science & Technology	4.60		4.60
Mass Media	2.50		2.50
Culture, Sports Tourism & Youth	2.51		2.51
Women Development	2.10		2.10
Population Welfare	9.10		9.10
Manpower & Employment	2.82		2.82
Social Welfare	1.00		1.00
Research, Statistics & Planning	1.00		1.00
Environment	3.53		3.53
SAP (Federal)	6.04		6.04
People's Programme	15.00		15.00
Special Areas(AJK,NA & FATA)	24.86		24.86
Total (Federal)	330.61	268.81	599.42
<u>PROVINCIAL</u>			
Normal Programme	70.00	-	70.00
SAP	81.78	-	81.78
Tameer-e-Sindh Programme	10.00	-	10.00
Afghan Refugees Programme	1.00	-	1.00
Total (Provincial)	162.78	-	162.78
Total(Federal + Provincial)	493.39	268.81	762.20
Operational Shortfall	10.07		10.07
Total (8th Plan)	483.32	268.81	752.13

Table-I-5.2

8th Plan Allocations (Corporations)

(Rs Billion)			
Corporations	Budget	Non-Budget	Total
<u>TRANSPORT AND COMMUNICATIONS</u>	<u>0.00</u>	<u>10.10</u>	<u>10.10</u>
1. K.P.T.	0.00	1.50	1.50
2. C.A.A.	0.00	4.40	4.40
3. P.I.A.C.	0.00	1.30	1.30
4. P.P.S.C.	0.00	2.90	2.90
<u>POWER</u>	<u>0.00</u>	<u>178.63</u>	<u>178.63</u>
1. WAPDA	0.00	146.25	146.25
2. KESC	0.00	32.38	32.38
<u>FUELS</u>	<u>4.08</u>	<u>78.56</u>	<u>82.64</u>
1. O.G.D.C.	0.00	33.69	33.69
2. SSGC	0.00	9.65	9.65
3. Iranian Refinery	2.89	11.0	13.89
4. LCDC	0.19	2.35	2.54
5. PARCO	0.00	12.29	12.29
6. NRL	0.00	0.82	0.82
7. HDIP/Others	1.00	0.50	1.50
8. PSO	0.00	0.00	0.00
9. SNGPL	0.00	8.26	8.26
<u>INDUSTRIES</u>	<u>0.00</u>	<u>1.52</u>	<u>1.52</u>
1. Pakistan Steel	0.00	1.02	1.02
2. USC	0.00	0.50	0.50
Total(Corporations)	4.08	268.81	272.89

Table-I-5.3**KEY PROJECTS OF 8TH PLAN IN PUBLIC SECTOR****1. Agriculture**

1. National Oil-Seed Development Project.
2. Agriculture Research Project-II(ARP-II).
3. Korangi Fish Harbour.
4. Forestry Planning & Development Project.

2. Water Resources Development

1. Chashma Right Bank Canal Stage I + II + III.
2. Pat Feeder Canal Rehabilitation and Improvement.
3. Fordwah Eastren Sadiqia Sub-Surface Drainage (South)
4. Swabi SCARP.
5. Irrigation System Rehabilitation Project Phase-II.
6. 1992 Flood/Rain Damage Restoration Project.
7. Onform Water Management Project.
8. Left Bank outfall Drainage (LBOD).
9. Right Bank outfall Drainage (RBOD).

3. Manufacturing

1. Heavy Electrical Complex Kot Najibullah, NWFP.
2. Expansion of Pakistan Steel Mills from 1.1 to 1.5 million tons per year.
3. Modernization of CTL Karachi/Lahore.

4. Minerals

Saindak Copper-Gold Projects.

5. Energy

1. Rural Electrification.
2. Thermal Generation & Transmission (i.e Muzaffarabad units 1 to 6, Kot Addu units 11-15, Bin Qasim unit-6; 500 KV Tarbela - Lahore; Lahore - Jamshoro; Tarbela - Peshawar; Hub - Jamshoro Transmission lines).
3. Chashma Nuclear.
4. Pirkoh Development Project.
5. Dhodak Development Project.
6. Ghazi Brotha Project.

6. Transport & Communication

National Highways

1. Improvement of Indus Highway (N-55).
2. Dualization of National Highway (N-5).
3. Lahore-Islamabad Motorway.

Telecommunications

		<u>Benchmark</u> <u>1992-93</u>	<u>Target</u> <u>1997-98</u>
1. Telephone	(Nos)	2,000,00	4,500,000
2. Density per 1000 Population		20.6	35.6
3. Telephone Exchanges	(Nos)	1600	3000
4. PCO's	(Nos)	6861	26861
5. STD/NWD Channels	(Nos)	60,000	120,000
6. NWD Stations	(Nos)	400	1000
7. Post Offices	(Nos)	13513	18513

7. Physical Planning & Housing

1. Supreme Court Building, Islamabad.
2. Development of Infrastructure, External Services & Ancillary Facilities for P.M. House, Islamabad.
3. Construction of P.M. Secretariat, Islamabad.
4. Construction of Residences for Judges of Supreme Court, Islamabad.
5. Construction of 5160 House for F.G Employees at Islamabad (Phase-II).
6. Construction of F.G Employees Housing in Islamabad Phase-III 2000 units).

8. Education and Training

1. Consolidated Programme for Development and Improvement of Primary Education by Federal Directorate of Education Islamabad.
2. Provision of Additional Accommodation in the Existing Primary School in Islamabad.
3. Girls Primary Education Development Project with ADBP Assistance.
4. Setting up of five more F.G. Model Schools in Islamabad.
5. Upgradation of Primary and Secondary Schools.
6. Establishment of Cadet Colleges Larkana.
7. Establishment of Cadet College Sangarh.
8. Eradication of Illiteracy from Selected Areas of Pakistan.
9. President one Thousand Scholarship Phase-II.
10. One Hundred Foreign Scholarship for Talented Students of BPS 1-15 F.G. Employees.
11. National Education Management System.

9. Health and Nutrition

1. Training of over 33,000 Community Health Workers.
2. Extended programme of Immunisation
3. Ayub Medical College, Abbottabad.
4. Bolan Medical College Quetta.
5. Drug Abuse Prevention Resource Centre, Islamabad (USAID).
6. MCH Centre PIMS, Islamabad.

10. Science & Technology

1. Development of S & T Manpower in High Technology Fields Phase-III.
2. Implementation of Technology Policy and its Associated Projects.
3. Balancing & Modernisation of PCSIR Labs, Centres and Institutes.

11. Population Welfare

1. Population Welfare Programme-Federal.
2. Population Welfare Programme Punjab, Sindh, NWFP and Balochistan.

12. Employment

1. National Vocational Training project.
2. Four Training Centres at Industrial Sites for Worker's Education/Motivation.
3. Human Resources Development-Strengthening of Data Base.

13. Women Development

1. Rearing Development of Industrial Insects at Hyderabad, Sindh.
2. Centres of Excellence for Women in Five Universities.
3. Working Women Hostel, Islamabad.
4. Small Credit Schemes for Women through First Women Bank.
5. Establishment Girls High School with Vocational Trades at Gujranwala, T.T.Singh, Okara and Attock.

14. Culture, Sports, Tourism and Youth

1. Publicity & Promotion Project for Improved Tourism Marketing.
2. 6 units of Chair Lifts/Cable Car/Ski Lifts in Kaghan Valley and Northern Areas.
3. Development of Recreational Facilities in Costal Areas and Hub Lake.
4. Preparation of Master Plan for Tourism Development in Northern Areas and other Schemes.
5. National Art Gallery, Islamabad.
6. Preservation of Moenjo-Daro Monuments.
7. Quaid-e-Azam Academy, Karachi.

15. Mass Media

1. Increasing the Range of Radio Broadcasts to Middle East, Gulf and Central Asian Regions.
2. Introduction of Satellite Transmission in Television Broadcasting.

16. Environment

1. Institutional Strengthening of Environment and Urban Affairs Division.
2. Institutional Strengthening of Pakistan Environment Protection Agency.
3. Strengthening of NCS Unit for Pakistan.
4. Consumer Power Factor Improvement.

17. Social Welfare

1. Special Education Centres at Division/District Levels.
2. National Special Education Centres for Integrated Education of Visually Handicapped at Islamabad.
3. Special Education Centres at Provincial Headquarters.

18. Narcotics

1. Area Development Projects.
2. Detoxification Centres at DHQs/THQs/Teaching Hospitals.

19. Rural Development

1. Farm-to-Market Road Project.
2. Mahmand Tribal Agency Agricultural and Area Development Project.
3. Bajour Tribal Agency Agricultural and Area Development Project.
4. Khyber Tribal Agency Agricultural and Area Development Project.
5. Tammer-e-Watan Programme.

20. Social Action Programme

	<u>Benchmark</u> 1992-93	<u>Target</u> 1997-98
- Primary School participation	69%	88%
- Boys	85%	95%
- Girls	54%	82%
Community Health Workers	60	14036
- ORS (000 Pocket)	13530	23,595
- TBAs (Nos)	6465	16469
- RHCs (Nos)	553	598
- BHUs (Nos)	4527	4694
- Rural Water Supply Coverage	47%	71%
- Rural Sanitation Coverage	14%	32%
- Population Growth	2.9%	2.7%
- SAP Allocation (Rs. Billion)	10.1	102
		(Eighth Plan)

Table-I-7.1

Balance of Payments

ITEMS	(Current Million \$)					
	1992-93 (Bench mark)*	1993-94	1994-95	1995-96	1996-97	1997-98
TRADE BALANCE	-2063	-1840	-1553	-1192	-742	-192
Exports (fob)	7550	8495	9558	10754	12099	13613
Imports (fob)	9613	10335	11111	11946	12841	13805
INVISIBLE BALANCE	-275	-383	-711	-1022	-1320	-1650
Non factor services (Net)	-1085	-1114	-1200	-1303	-1416	-1537
Receipts	1592	1791	2015	2267	2550	2869
Payments	2677	2905	3215	3570	3966	4406
Freight & Insurance	867	878	944	1015	1092	1173
Others	1810	2027	2271	2555	2874	3233
Factor Services (Net)	810	731	489	281	96	-113
Receipts	2285	2327	2370	2414	2459	2504
Private Transfers	2197	2238	2280	2323	2367	2412
Workers Remittances	1550	1581	1613	1645	1678	1711
FCA(Residents)	400	400	400	400	400	400
Unrequited Transfers	247	257	267	278	289	301
Investment Income	88	89	90	91	92	92
Payments	1475	1596	1881	2133	2363	2617
Private Transfers	13	16	17	18	19	20
Investment Income	1462	1580	1864	2115	2344	2597
Interest	756	789	978	1119	1218	1319
Others	706	791	886	996	1126	1278
CURRENT ACCOUNT BALANCE	-2338	-2223	-2264	-2214	-2062	-1842
LONG TERM CAPITAL (net)	1844	2336	2415	2561	2894	3141
Gross Disbursements	2407	2539	2555	2650	3015	3435
Project Aid	1737	1925	2230	2540	2905	3325
Commodity Aid	262	245	145	30	30	30
Food Aid	308	255	80	80	80	80
Refugee Assistance	100	114	100	0	0	0
Amortisation	1055	803	840	889	921	1094
Other Official Trans(net)	-8	0	0	0	0	0
Private Long Term Capital (net)	500	600	700	800	800	800
Errors & Omissions	-64	0	0	0	0	0
BALANCE REQUIRING OFFICIAL FINANCING	-558	113	151	347	832	1299
OFFICIAL ASSISTANCE & DEBT RELIEF	485	612	528	361	-49	-457
Debt Relief	8	0	0	0	0	0
Medium & Short Term Capital (net)	154	50	50	50	50	50
Others	173	412	328	161	-249	-657
FEBC, DBC & FCBC (net)	150	150	150	150	150	150
OVERALL BALANCE (NET FOREIGN ASSETS)	-73	725	679	708	783	842
NET USE OF FUND CREDIT	103	-109	-107	-167	-165	-137
Repurchases	159	109	107	167	165	137
Purchases	262	0	0	0	0	0
Fund SAF	0	0	0	0	0	0
Fund SBA	0	0	0	0	0	0
Repayment of Deposits	0	-16	-16	-16	-16	-16
Foreign Currency Accounts	-100	100	100	100	100	100
Other Deposit Money Banks	-200	-340	-382	-430	-484	-545
CHANGES IN RESERVES	-270	360	274	195	218	244
MEMO ITEMS:						
CAB as % of GDP(Nominal terms)	4.4	4.2	3.9	3.5	2.9	2.4
GROSS RESERVES LEVEL	416	776	1050	1245	1463	1707
GROSS RESERVES AS WEEKS OF IMPORTS (FOB)	2.3	3.9	4.9	5.4	5.9	6.4

* Benchmark may not tally with actuals.

Table-II-1.1
Sectoral Growth Targets

(1992-93 Billion Rs)

SECTORS	1992-93 BENCH MARK	1997-98	ANNUAL GROWTH RATES
Agriculture	301.9	382.8	4.9
Major Crops	127.1	156.7	4.3
Minor Crops	49.5	60.3	4.0
Livestocks	113.9	152.7	6.0
Fishing	7.8	9.0	2.9
Forestry	3.6	4.1	2.8
Mining & Quarrying	8.5	14.6	11.4
Manufacturing	218.5	349.9	9.9
Large Scale	152.1	250.6	10.5
Small Scale	66.3	99.3	8.4
Construction	54.4	79.2	7.8
Electricity & Gas Distri.	41.9	62.2	8.2
TOTAL COMMODITIES	625.2	888.7	7.3
Transport, Storage & Comm:	113.3	150.2	5.8
Commerce	208.4	310.1	8.3
Financial Institutions & Insurance	41.8	55.4	5.8
Ownership of Dwellings	53.3	69.0	5.3
Public Admn & Defence	96.0	125.4	5.5
Services	93.8	128.6	6.5
TOTAL SERVICES	606.6	838.6	6.7
GDP at Factor Cost	1231.8	1727.3	7.0

Table-II-2.1**Private Investment During the Eighth Plan***(At 1992-93 Prices)**(Billion Rupees)*

SECTOR	SEVENTH PLAN		EIGHTH PLAN	
	AMOUNT	SHARE (%)	AMOUNT	SHARE (%)
1. Agriculture	91.9	15.4	90.8	9.5
2. Manufacturing	245.1	41.1	365.2	38.5
- Large Scale	215.3	36.1	315.2	33.2
- Small Scale	29.8	5.0	50.0	5.3
3. Energy	3.4	0.6	134.0	14.1
4. Transport and Communications	53.3	8.9	185.0	19.5
5. Ownership of Dwellings	129.5	21.7	110.0	11.6
6. Services/Others	73.0	12.3	63.4	6.7
Total:	596.2	100.0	948.4	100.0

Table-II-2.2

**Primary School Enrolment and
Participation Rates
(1993-98)**

	1992-93			1997-98			(000) ANNUAL INCREASE (%)
	Boys	Girls	Total	Boys	Girls	Total	
Punjab	4,101 (88.0)	2,916 (66.3)	7,017 (77.5)	5,070 (96.8)	4,592 (91.8)	9,662 (94.4)	6.6
Sindh	1,786 (86.2)	855 (41.8)	2,641 (64.1)	2,330 (99.1)	1,564 (66.9)	3,894 (83.0)	8.1
NWFP	1,070 (80.7)	459 (36.0)	1,529 (58.8)	1,435 (94.8)	1,124 (77.3)	2,559 (86.2)	10.8
Balochistan	378 (71.6)	121 (23.3)	499 (47.7)	511 (84.9)	309 (52.0)	820 (68.6)	10.4
Azad Kashmir	219 (100.9)	186 (89.0)	405 (95.1)	247 (100.0)	237 (100.0)	484 (100.0)	3.6
FATA	155 (60.1)	22 (9.2)	177 (35.7)	209 (70.6)	77 (28.2)	286 (50.3)	10.1
Northern Areas	30 (36.1)	15 (19.2)	45 (28.0)	65 (65.7)	40 (43.0)	105 (54.7)	18.5
Islamabad	53 (89.8)	48 (84.2)	101 (87.1)	77 (100.0)	75 (100.0)	152 (100.0)	8.5
TOTAL PAKISTAN	7,792 (84.8)	4,622 (53.7)	12,414 (68.9)	9,944 (95.5)	8,018 (81.6)	17,962 (87.7)	7.7

Note: Figures in parenthesis show participation rates.

Table-II-2.3
Targets for Preventive
Health Programme
(1993-98)

	1992-93				1997-98			
	IMMUNIZ- ATION (000)	ORS (000)	TBA (Nos)	CHWs (Nos)	IMMUNIZ- ATION (000)	ORS (000)	TBA (Nos)	CHWs (Nos)
Punjab	2,140 (82%)	8,000	3,000	-	2,630 (92%)	12,000	9,000	7000
Sindh	630 (66%)	3,000	2,000	-	1,200 (82%)	5,300	3,300	800
NWFP	580 (85%)	1,000	850	-	670 (96%)	2,400	3,000	3800
Balochistan	74 (28%)	600	400	-	160 (80%)	1,600	540	2,211
FATA	50 (55%)	300	5	-	100 (80%)	800	120	-
Azad Kashmir	70 (80%)	500	150	-	115 (95%)	1000	324	-
Northern Areas	10 (55%)	100	50	60	20 (70%)	450	125	145
ICT	3 (70%)	30	10	-	7 (90%)	45	60	80
TOTAL	3,557	13,530	6,465	60	4,902	23,695	16,469	14,036
PAKISTAN	(80%)				(90%)			

Note: Figures under immunization show total numbers and in parenthesis per cent of population covered in age group 0-1 and backlog of less than two years not covered previously.

Table-II-2.4

**Targets for Preventive
Health Programme
(1993-98)**

	PUNJAB	SINDH	NWFP	BALUCH- ISTAN	SPECIAL AREAS	(Nos) TOTAL
1. Immunization (Million Children)	12.35	5.00	3.15	0.65	0.93	22.08
2. ORS (Million Packets)	49.0	19.5	9.5	5.8	8.7	92.5
3. Training of TBA's	31,200	13,500	8,150	2,400	2,494	57,744
4. CHWs	18,500	3,000	9,000	6,411	900	37,811
5. New BHU's	30	81	--	120	21	252
6. New RHC's	5	--	--	40	--	45
7. Strengthening/ improvement of BHU's	2,350	50	700	350	424	3,874
8. Strengthening/ improvement of RHC's/ Civil Hospitals	300	61	70	35	26	492
9. Urban Health Centres	550	30	--	4	32	616
10. Dispensaries (New)	--	444	--	50	--	494
11. Mobile Dispensaries	--	---	--	40	--	40
12. Detoxification Centres	--	--	--	5	--	5
13. Training of Paramedics. (SAP)	--	--	--	--	100	100

Table-II-2.5
Nutrition for the SAP

	1992-93 BENCHMARK	1997-98
1. Nutrition in Primary Health Care System		
i. Establishment of Nutrition Clinics at RHCs/BHUs (Facilities)	-	
ii. Nutrition Surveillance System System through Growth Monitoring and Promotion (Facilities)	-	5000
iii. Food Demonstration for Improved Feeding, Weaning and Supplementary Feeding of Children/Mothers (Facilities)	-	
2. Girls School Feeding Programme for Girls Students Feeding twice week (Million Children)	0.5	2.87
3. Nutrition Intervention Programme for Combating Diseases of Nutrition Origin (Million Population)	10	90
i. Iodine Deficiency Disease		
ii. Iron Deficiency Anaemia		
iii. Vitamin A Diseases		
4. Low birth weight babies (%)	25	13
5. Under weight mothers (%)	34	15
6. Malnutrition in children below 5 years of age (%)	38	15
7. Goiter prevalence(%)	3.0	1.5

Note:- Figures against items 4 to 7, are benchmark and terminal year indices.

Table-II-2.6
Physical Targets for
Rural Water Supply and Sanitation
(1993-98)

	1992-93		1997-98		ANNUAL AVG. INCREASE	
	RWS	RS	RWS	RS	RWS	RS
Punjab	21.57 (45.35)	9.55 (20.08)	37.21 (70.78)	21.31 (40.54)	11.52	17.41
Sindh	5.59 (38.01)	0.96 (6.53)	8.82 (54.13)	1.94 (11.91)	9.55	15.11
NWFP	8.74 (65.55)	0.67 (5.02)	13.26 (88.18)	4.68 (31.12)	8.69	47.51
Balochistan	2.35 (44.96)	0.52 (9.95)	4.49 (75.03)	2.10 (35.09)	13.82	32.20
FATA	1.45 (46.93)	0.03 (0.97)	2.40 (67.42)	0.29 (8.15)	10.60	57.42
AJ&K	1.08 (45.19)	0.05 (2.09)	1.73 (63.60)	0.21 (7.72)	9.88	33.24
Northern Areas	0.30 (35.71)	0.02 (2.38)	0.58 (59.79)	0.08 (8.25)	14.09	31.95
TOTAL PAKISTAN	41.08 (47.14)	11.80 (13.54)	68.49 (70.51)	30.61 (31.51)	10.76	21.00

Note: Figures in parentheses show percent of population covered by each facility

RWS = Rural Water Supply RS = Rural Sanitation

Table-II-2.7

Physical Targets for Population

NAME OF SERVICE OUTLET	(Cumulative Numbers)					
	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98
A. PROGRAMME OUTLETS:	1499	1499	1650	1841	1921	1921
i) Family Welfare Centres	1290	1290	1340	1420	1500	1500
ii) Reproductive Health Service "A" Centres	79	79	125	170	170	170
iii) Mobile Service Units	130	130	185	251	251	251
B. LINE DEPARTMENT OUTLETS:	14658	26737	35022	43669	54105	56950
i) Health Departments	2824	5440	6023	6324	6649	7000
ii) Other Line Departments	160	168	195	226	262	300
iii) Target Group Institutions	174	229	284	339	394	450
iv) Traditional Birth Attendants	5000	7000	7000	7000	7000	7000
v) Registered Medical Practitioners	2500	6500	11100	15950	22500	22500
vi) Hakeems	2500	5150	7400	10050	12750	14800
vii) Homeopaths	1500	2250	3020	3780	4550	4900
C. NON GOVERNMENT ORGANIZATIONS	468	508	578	678	788	1000
D. COMMUNITY BASED SERVICES						
Family Planning Workers	1646	3000	5000	10000	12000	12000
E. SOCIAL MARKETING OF CONTRACEPTIVES (SALES POINTS)	67000	67000	70000	70000	75000	80000
F. SPECIAL AREAS PROGRAMME						
i) Family Welfare Centres	6	6	6	6	6	6
ii) Reproductive Health Services	--	2	3	4	4	4
iii) Health Outlets	--	214	321	401	478	526
iv) Traditional Birth Attendants	--	30	70	100	130	160
v) Hakeems	--	150	200	200	200	200
vi) Homeopaths	--	20	40	50	80	100

Table-II-2.8**Contraceptive Requirements during 8th Plan
(1993-98)**

METHOD	(Million)						
	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1993-98
Condoms	121.99	127.20	130.44	135.13	137.98	147.94	678.19
Oral Pills	3.25	3.47	4.52	5.53	6.01	7.37	26.91
I.U.D.	0.70	0.81	0.89	0.91	1.08	1.17	4.85
Injectibles	1.66	2.00	2.77	3.46	4.45	5.68	18.36
Foam	0.14	0.15	0.18	0.20	0.24	0.27	1.05

Table-II-2.9
Development Allocations for SAP 1993-98
(National)

	1992-93 (Bench- mark)	1993-94	1994-95	1995-96	1996-97	1997-98	(Billion Rs) Total 8th Plan 1993-98
BASIC EDUCATION	3.993	5.518	6.305	7.730	9.183	10.583	39.319
Primary Education	3.799	5.063	5.540	6.416	7.396	8.254	32.669
Teacher Education	0.062	0.160	0.290	0.529	0.609	0.752	2.340
Adult Literacy	0.002	0.117	0.199	0.319	0.472	0.643	1.750
Education Foundation	0.130	0.178	0.276	0.466	0.706	0.934	2.560
PRIMARY HEALTH	1.435	2.563	3.168	3.477	3.978	5.214	18.400
Preventive Programme	0.464	0.913	1.192	1.323	1.608	2.204	7.240
Rural Health	0.691	1.316	1.571	1.772	1.910	2.396	8.965
Mohallah (Urban) Health Centres	0.000	0.034	0.091	0.110	0.161	0.208	0.604
Health Foundation	0.280	0.300	0.314	0.272	0.299	0.406	1.591
NUTRITION	0.005	0.844	1.037	0.714	0.651	0.614	3.860
POPULATION WELFARE	0.830	1.180	1.570	1.990	2.140	2.220	9.100
RURAL WATER SUPPLY AND SANITATION	3.830	5.030	5.569	6.320	6.854	7.660	31.433
Rural Water Supply	3.222	4.032	4.391	4.741	4.998	5.446	23.608
Rural Sanitation	0.608	0.998	1.178	1.579	1.856	2.214	7.825
INSTITUTIONAL, MONITORING AND RESEARCH CAPACITY FOR SAP	0.000	0.069	0.068	0.057	0.058	0.059	0.311
Total	10.093	15.204	17.717	20.288	22.864	26.350	102.423

Table-II-2.10

Development Allocations for SAP 1993-98
Provincial Annual

	1992-93 (BENCH- MARK)	1993-94	1994-95	1995-96	1996-97	1997-98	(Billion Rs) Total 8th Plan 1993-98
BASIC EDUCATION	3.796	5.157	5.835	7.188	8.541	9.849	36.570
Primary Education	3.617	4.780	5.170	5.980	6.880	7.660	30.470
Teacher Education	0.049	0.130	0.250	0.500	0.580	0.730	2.190
Adult Literacy	0.000	0.073	0.147	0.254	0.391	0.545	1.410
Education Foundation	0.130	0.174	0.268	0.454	0.690	0.914	2.500
PRIMARY HEALTH	1.160	2.133	2.671	2.925	3.374	4.555	15.658
Preventive Programme	0.283	0.611	0.843	0.964	1.214	1.788	5.420
Rural Health	0.597	1.192	1.427	1.583	1.704	2.157	8.063
Mohallah (Urban) Health Centres	0.000	0.030	0.087	0.106	0.157	0.204	0.584
Health Foundation	0.280	0.300	0.314	0.272	0.299	0.406	1.591
NUTRITION	0.000	0.043	0.055	0.040	0.035	0.027	0.200
RURAL WATER SUPPLY AND SANITATION	3.550	4.620	5.130	5.850	6.360	7.140	29.100
Rural Water Supply	2.950	3.650	3.990	4.320	4.560	4.990	21.510
Rural Sanitation	0.600	0.970	1.140	1.530	1.800	2.150	7.590
INSTITUTIONAL, MONITORING AND RESEARCH CAPACITY FOR SAP	0.000	0.050	0.050	0.050	0.051	0.051	0.252
Total	8.506	12.003	13.741	16.053	18.361	21.622	81.780

Table-II-2.11

Development Allocations for SAP 1993-98
Provincial

	<i>(Billion Rs)</i>				
	PUNJAB	SINDH	NWFP	BALUCHISTAN	TOTAL 8th PLAN 1993-98
BASIC EDUCATION	18.640	9.060	6.890	1.980	36.570
Primary Education	14.690	7.740	6.350	1.690	30.470
Teacher Education	1.170	0.590	0.240	0.190	2.190
Adult Literacy	0.810	0.530	0.040	0.030	1.410
Education Foundation	1.970	0.200	0.260	0.070	2.500
PRIMARY HEALTH	9.560	2.690	0.950	2.458	15.658
Preventive Programme	3.483	1.299	0.317	0.321	5.420
Rural Health	4.312	1.243	0.490	2.018	8.063
Mohallah (Urban) Health Centres	0.550	0.030	0.000	0.004	0.584
Health Foundation	1.215	0.118	0.143	0.115	1.591
NUTRITION	0.100	0.060	0.030	0.010	0.200
RURAL WATER SUPPLY AND SANITATION	14.200	5.290	6.150	3.460	29.100
Rural Water Supply	10.340	3.820	4.550	2.800	21.510
Rural Sanitation	3.860	1.470	1.600	0.660	7.590
INSTITUTIONAL, MONITORING AND RESEARCH CAPACITY FOR SAP	0.100	0.040	0.030	0.082	0.252
Total	42.600	17.140	14.050	7.990	81.780

Table-II-2.12

**Development Allocations for SAP 1993-98
Federal and Special Areas**

	1992-93 (BENCH- MARK)	1993-94	1994-95	1995-96	1996-97	1997-98	(Billion Rs) TOTAL 8th PLAN 1993-98
BASIC EDUCATION	0.197	0.361	0.470	0.542	0.642	0.734	2.749
Primary Education	0.182	0.283	0.370	0.436	0.516	0.594	2.199
Teachers Education	0.013	0.030	0.040	0.029	0.029	0.022	0.150
Adult Literacy	0.002	0.044	0.052	0.065	0.081	0.098	0.340
Education Foundation	0.000	0.004	0.008	0.012	0.016	0.020	0.060
PRIMARY HEALTH	0.275	0.430	0.497	0.552	0.604	0.659	2.742
Preventive Programme	0.181	0.302	0.349	0.359	0.394	0.416	1.820
Rural Health	0.094	0.124	0.144	0.189	0.206	0.239	0.902
Mohallah Health Centres	0.000	0.004	0.004	0.004	0.004	0.004	0.020
Health Foundation	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NUTRITION	0.005	0.801	0.982	0.674	0.616	0.587	3.660
POPULATION WELFARE	0.830	1.180	1.570	1.990	2.140	2.220	9.100
RURAL WATER SUPPLY AND SANITATION	0.280	0.410	0.439	0.470	0.494	0.520	2.333
Rural Water Supply	0.272	0.382	0.401	0.421	0.438	0.456	2.098
Rural Sanitation	0.008	0.028	0.038	0.049	0.056	0.064	0.235
INSTITUTIONAL, MONITORING AND RESEARCH CAPACITY FOR SAP	0.000	0.019	0.018	0.007	0.007	0.008	0.059
Total	1.587	3.201	3.976	4.235	4.503	4.728	20.643

Table-II-2.13

**Development Allocations for SAP 1993-98
Federal Programme**

	1992-93 (BENCH- MARK)	1993-94	1994-95	1995-96	1996-97	1997-98	(Billion Rs) Total 8th Plan 1993-98
BASIC EDUCATION	0.021	0.050	0.060	0.074	0.089	0.103	0.376
Primary Education	0.014	0.027	0.031	0.038	0.046	0.054	0.196
Teachers Education	0.005	0.003	0.003	0.004	0.005	0.005	0.020
Adult Literacy	0.002	0.016	0.018	0.020	0.022	0.024	0.100
Education Foundation	0.000	0.004	0.008	0.012	0.016	0.020	0.060
PRIMARY HEALTH	0.166	0.279	0.323	0.330	0.361	0.380	1.673
Preventive Programme	0.166	0.279	0.323	0.330	0.361	0.380	1.673
Rural Health	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Mohallah Health Centres	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Health Foundation	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NUTRITION	0.004	0.790	0.970	0.660	0.600	0.570	3.590
POPULATION WELFARE	0.830	1.180	1.570	1.990	2.140	2.220	9.100
RURAL WATER SUPPLY AND SANITATION	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Rural Water Supply	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Rural Sanitation	0.000	0.000	0.000	0.000	0.000	0.000	0.000
INSTITUTIONAL, MONITORING AND RESEARCH CAPACITY FOR SAP	0.000	0.010	0.010	0.000	0.000	0.000	0.020
Total	1.021	2.309	2.933	3.054	3.190	3.273	14.759

Table-II-2.14
Development Allocations for SAP 1993-98
Special Areas

	FATA	Azad Kashmir	NORTHERN AREAS	ICT	(Billion Rs) TOTAL 8th PLAN 1993-98
BASIC EDUCATION	0.958	0.775	0.432	0.208	2.373
Primary Education	0.843	0.620	0.362	0.178	2.003
Teacher Education	0.025	0.065	0.040	0.000	0.130
Adult Literacy	0.090	0.090	0.030	0.030	0.240
Education Foundation	0.000	0.000	0.000	0.000	0.000
PRIMARY HEALTH	0.397	0.435	0.192	0.045	1.069
Preventive Programme	0.080	0.032	0.035	0.000	0.147
Rural Health	0.317	0.403	0.157	0.025	0.902
Mohallah (Urban) Health Centres	0.000	0.000	0.000	0.020	0.020
Health Foundation	0.000	0.000	0.000	0.000	0.000
NUTRITION	0.000	0.020	0.050	0.000	0.070
RURAL WATER SUPPLY AND SANITATION	1.115	0.812	0.344	0.062	2.333
Rural Water Supply	1.000	0.770	0.294	0.034	2.098
Rural Sanitation	0.115	0.042	0.050	0.028	0.235
INSTITUTIONAL, MONITORING AND RESEARCH CAPACITY FOR SAP	0.006	0.018	0.012	0.003	0.039
Total	2.476	2.060	1.030	0.318	5.884

Table-II-2.15

**Major Energy Sector Targets
(1993 - 1998)**

Sr. No.	Description	Benchmark 1992/93	1997/98
	<u>POWER</u>		
1.	Installed Capacity (MW)		
	– Public Sector	9649	13585
	– Private	–	2700
	– PAEC & Others	137	137
	– Total	9786	16422
	– Addition in Capacity	2992	6636
2.	Maximum Demand (MW)		
	– System Demand	8611	11173
	– Addition in Demand	2724	2562
	– Growth Rate (%)	7.9	5.35
3.	Energy Generated (GWh)		
	– Annual Energy	48639	68617
	– Addition in Annual Generation	15442	19978
	– Growth rate w.r.t. 1987-88(%)	7.94	7.12
4.	System Losses		
	– WAPDA	23	18.5
	– KESC	34	19
5.	Consumers		
	– Urban	4.7	6.0
	– Rural	4.6	6.4
6.	No. of Village/Abadis Electrified		
	– Cumulative	35171	54871
	– Addition	17447	19700
	<u>FUEL</u>		
7.	Oil Demand(Domestic) (000 tons).	12200	18300
8.	Oil Production (000 BPD).	60	123.3
	– Public Sector	26	52.2
	– Private	34	71.1

Table-II-2.15

Sr. No.	Description	Benchmark 1992/93	1997/98
9.	Oil Bill (Mill.\$)	1578	2300
10.	Refinery Capacity (Mill Tons).	6.33	7.94
11.	Storage Capacity (Metric Tons)	70000	110000
12.	No. of Wells Drilling	217	350
	– Exploratory	46	70
	o OGDC	44	72
	o Private		
	– Development	77	110
	o OGDC	50	98
	o Private		
13.	Gas Production(Peak) (MMCFD)	1855	2554
	Gas Production(Average) (MMCFD)	1598	2200
14.	No. of Gas Consumers (Millions)	1.8	3.3
15.	LPG Production (Tons/Day)	303	595
16.	Coal Production (Mill/Tons)	6.46	10.52
PRIMARY ENERGY			
17.	Demand Growth Rate (%)		
	– Power	8.1	5.3
	– Oil	6.9	7.7
	– Gas	5.9	6.6
	– Coal	2.4	10.3
	– Biomas	3.5	1.6

TARGET

Table-II-2.16

**Major Physical Targets
(Transport and Communications)**

Sub-Sector	Unit	Benchmark 1992-93	Target 1997-98
A. TRAFFIC			
1. RAILWAYS			
a) Passenger	(M.P.Kms)	20,771	22,932
b) Freight	(M.T.Kms)	6,400	9,850
II. ROAD			
a) Passenger	(M.P.Kms)	135,000	1,54,481
b) Freight	(M.T.Kms)	37,000	40,390
III. AIR			
DOMESTIC			
a) Passenger	(MRP.Kms)	2,737	4,006
b) Freight	(MRFT.Kms)	42	53
INTERNATIONAL			
a) Passenger	(MRP.Kms)	7,739	9,740
b) Freight	(MRFT.Kms)	449	522
Total			
a) Passenger	(MRP.Kms)	10,476	13,747
Freight (MRFT.Kms)		491	575
IV. PORT			
a) Dry Cargo	(Million Tonnes)	11.1	13.000
b) Liquid Cargo		11.5	14.400
V. TELEGRAPH & TELEPHONE:			
a) Trunk Traffic	(Million calls)	388	747
b) Telex Traffic		49.5	29.2
c) Inland Telegram	(Message in million)	1.44	0.677
d) Overseas Telegrams	(Message in million)	0.13	0.025

Sub-Sector	Unit	Benchmark 1992-93	Target 1997-98
B. PHYSICAL TARGETS:			
I. RAILWAYS:			
a) Manufacture of D.E.Locos.	(Nos)	-	51
b) Rehabilitation of Locomotives	(Nos)	-	101
c) Manufacture of Passenger Carriages	(Nos)	-	158
d) Conversion of existing coaches to A.C.Coaches.	(Nos)	-	56
e) Refurbishing of Passenger Coaches.	(Nos)	-	90
f) Track Rehabilitation	Kms	-	3,600
i) Rail Renewal	"	-	3,000
ii) Sleeper Renewal	"	-	800
g) Doubling of Track		-	
h) High Capacity Wagons		-	
II. NATIONAL HIGHWAYS			
a) Total Kilometerage	Kms	6621	6956
b) Rehabilitation/Improvement	"	-	4659
c) New Construction	"	-	335

IV. AVIATION

A. INFRASTRUCTURE

- i) Improvement of runways, Taxiways and Aprons.
- ii) International and Haj Terminal at Islamabad.
- iii) Upgradation of Multan Airport for Airbus Operation.
- iv) New Air Terminal Building at Lahore.
- v) New International Airport at Peshawar and Islamabad under the private sector.
- vi) Basic aerodrome facilities at Rahimyar Khan. Sehwan Sharif and Mansehra.
- vii) Procurement of crash fire and rescue vehicles.

B. AIRCRAFT

- i) Replacement of Boeing 747 aircraft with 7 New Wide Bodied aircraft.
- ii) Replacement of Fokker F-27 aircraft with 15 new TurboProp aircraft.
- iii) Purchase of equivalent capacity of two Airbus A310-300 and three Boeing 737-300 aircraft.

Telecommunication Targets

	Unit	Benchmark 1992-93	Target 1997-98
Telegraph and Telephone			
a) Trunk Traffic	Million calls	388	747.06
b) Telex Traffic	Million Calls.	49.45	49.45
c) Inland Telegram	(Message in million)	1.44	0.677
d) Overseas Telegram	(Message in million)	0.13	0.025

Telegraph & Telephone (PTC including SCO) June, 1998	Unit	Benchmark	Target 1992-93	Position on 1993-98
1. Telephone	(Nos)	2,000,000	2,500,000	4,500,000
2. Telephone Density	(per 1000 population)	20.6	-	35.6
3. Telephone Exchange	(Nos)	16,00	1400	3,000
4. NWD Terminals	"	400	600	1000
5. P.C.Os	"	6,861	20,000	26,861
6. Trunk position	"	1400	1100	2,500
7. Telex Line Units	"	14,000	1,000	15,000
8. STD/NWD/Channel	"	60,000	60,000	120,000
9. VFT Channel	"	7,000	3,000	10,000
10. Computerized Directory	"	5	3	8

Table-II-3.1

Development Projects of the Manpower Sector

(Million Rs)

Sl. No.	Name of Scheme	Status	8th Plan Allocation
I	FEDERAL PROGRAMMES		2820.000
	Ongoing Projects		1491.620
1	National Vocational Training Project, Phase II	Approved	1450.000
2	HRD Strengthening of Data Base Project	Approved	26.000
3	NIRC Building	Approved	4.120
4	PMI Hostel	Approved	11.500
5	expansion of Workers programme	Approved	7.000
II.	New Projects		1328.380
III.	PROVINCIAL PROJECTS		464.215
	Baluchistan		112.00
	NWFP		148.000
	Punjab		139.000
	Sindh		65.000
Total(I&III)			3284.215

Table-II-3.2
Financial Allocations
(Environment Sector)

<i>(Rs. Million)</i>		
Sl. No.	Agency/Govt	Proposed Allocation in Environment Sector
1	2	3
I. FEDERAL		
A. FEDERAL AGENCIES		
	1) ENERCON	660.32
	2) WAPDA	30.00
	3) PARC	415.83
	4) M/O Science and Technology	225.05
	5) M/O Food & Agriculture	394.51
	6) M/O Tourism and Culture	752.85
	7) Env't. & Urban Affairs Division	526.56
	8) P & D Division	25.00
	Sub-Total	3030.12
	B. NGO SUPPORT FUND	500.00
	TOTAL FEDERAL (A+B)	3530.12
II. SPECIAL AREAS		
	1) AJ & K	1200.07
	2) NA	314.40
	3) FATA	935.00
	Sub-Total	2449.47
III. PROVINCIAL GOVERNMENTS		
	1) Punjab	7675.46
	ii) Sindh	2878.63
	iii) NWFP	3689.56
	iv) Balochistan	1362.19
	Sub-Total	15605.84
	TOTAL ENVIRONMENT (I+II+III)	21585.43

Table-II-3.3
Financial Requirements for NCS 14
Core Area Wise Programme

<i>(Rs Million)</i>			
Sr. No.	CORE AREA PROGRAMME	No. of Schemes	Proposed Allocation in Environment Sector
1	2	3	4
1.	Maintaining Soils in Croplands	12	1,337.50
2.	Increasing Irrigation Efficiency	8	431.08
3.	Protecting Watersheds	13	2,199.01
4.	Supporting Forestry and Plantations	21	1,734.82
5.	Restoring Rangelands and Improving Livestock	24	3,152.73
6.	Protecting Waterbodies and Sustaining Fisheries.	24	661.25
7.	Conserving Biodiversity	29	1,624.11
8.	Increasing Energy Efficiency	12	901.32
9.	Developing and Deploying Renewables	4	62.70
10.	Preventing and Abating Pollution	37	3,626.83
11.	Managing Urban Wastes	14	4,284.32
12.	Supporting Institutions	23	667.08
13.	Integrating Population and Environment Programmes.	11	92.18
14.	Preserving the Cultural Heritage	18	310.50
	Total	250	21,085.43
	NGO Support Fund		500.00
	GRAND TOTAL	250	21,585.43

Table-II-3.4**Eighth Five Year Plan (1993-98)***Environment Related Programme**(Rs.Million)*

Sr. No.	SECTOR	PROPOSED ALLOCATION IN EIGHTH FIVE YEAR PLAN
1.	SCARP Project	25,420.00
2.	Irrigation System Rehabilitation	5,353.00
3.	Command Water Deve.Programme	1,961.10
4.	On-Farm Water Management Programme	5,199.00
5.	Afforestation Programme	812.90
6.	Livestock Development Programme	248.00
7.	Fisheries Programme	262.00
8.	Gypsum Application Programme	400.00
9.	Water Supply & Sewerage Drainage Projects	41,000.00
10.	Transmission & Distribution of Power	1,250.00
11.	Small Hydel Projects	1,939.00
12.	Population Welfare Programme	6,370.00
13.	Rural Support Programme for Community Dev.	4,980.00
Total:-		95,195.00

Table-II-4.1

Development Programmes of the Ministry of Women Development

(Million Rs)

S.No. Name of Sector/ Project	Punjab	Sindh	NWFP	Baluch istan	Federal Area/ICT	FATA/ FANA	AJ&K	Total
1 Women Polytechnic Institutes	45	20	15	7	15	7	6	115
2 Vocational Training Institutes	59	26	20	10	19	8	8	150
3 Computer Training Centre	10	4	3	2	3	2	1	25
4 Commercial Training Centre	12	5	4	2	4	2	1	30
5 Industrial Homes	34	14	11	5	11	5	5	85
6 Readymade Garments/Hosiery	26	11	8	4	8	4	4	65
7 MCH Centres/Population Welfare Centres	36	15	12	5	12	5	5	90
8 Training for Nurses/ LHV's/ TBAs	36	15	12	5	12	5	5	90
9 Food & Vegetable Preservation Centres	24	10	8	4	8	3	3	60
10 Sericulture, Fishculture, Poultry, and Bee Keeping Training Centres	20	9	6	3	7	3	2	50
11 Agriculture Cooperatives	24	10	8	4	8	3	3	60
12 Working Women Hostels	60	26	19	9	19	9	8	150
13 Community Halls	36	15	12	5	12	5	5	90
14 Day Care Centres	36	15	12	5	12	5	5	90
15 Monitoring & Evaluation	10	4	3	2	3	2	1	25
16 Research/ Data Base/ Surveys	20	9	6	3	7	3	2	50
17 Training in WID	20	9	6	3	7	3	2	50
18 Agricultural Sector Projects	27	13	9	4	9	4	4	70
19 Industrial Projects	20	9	6	3	7	3	2	50
20 Institutional Arrangements protection of Women's Rights	-	-	-	-	180	-	-	180
21 NGO's support programmes (SWAP)	200	95	80	50	25	30	45	525
Total	755	334	260	135	388	111	117	2100

Table-II-4.2

**NGO's Support Programme (SWAP) Under Ministry of
Women Development During 8th Plan**

(Million Rs)

S.NO	Sector	Punjab	Sindh	NWFP	Baluch- istan	Federal Area/ICT	AJ&K	FATA/FANA	Total
1	Agriculture& Live Stocks	33	5	10	5	2	5	5	65
2	Health	49	30	25	20	7	5	15	151
3	Education	30	20	15	7	6	5	10	93
4	Social Welfare	59	30	15	10	5	10	10	139
5	Vocational Training	29	10	15	8	5	5	5	77
Total		200	95	80	50	25	30	45	525

Table-II-4.3
Physical Targets for Eighth Five Year Plan
1993-98

S.No.	Sub-Sector	Unit	Target
1.	Rural Roads	KM	10000
2.	<u>Rural Education</u>		
	i) Primary education for rural area	Additional Children in Million	4.2
	ii) Teacher training in rural areas	Nos.in million	0.21
	iii) Non formal education	Nos.in million	6.00
3.	<u>Rural Health</u>		
	i) Basic Health Unit*	Nos.	4126*
	ii) Rural Health Centre**	Nos.	537**
	iii) Mobile Dispensaries	Nos.	370
	iv) Immunization Programme	Children	90%
		Mother	90%
	v) Village Health Workers	Nos.	33000
4.	Village Electrification	No of village	19700
5.	<u>Rural Water Supply and Sanitation</u>		
	i) Rural Water Supply	Additional Pop. to be served in million	27.41
	ii) Rural Sanitation	-do-	18.81
6.	Population Welfare	Additional Acceptors in Million	2.06

**Includes 3874 existing BHUs to be upgraded and construction of 252 additional BHUs during the Plan period.*

***Includes 492 existing RHCs to be upgraded and construction of 45 additional RHCs during the Plan period.*

Table-II-4.4

**Province Wise Physical Target For Eighth Five Year Plan
1993-98**

S.No.	Sub-Sector	Unit	TARGET 1993-98					Total
			Punjab	Sind	NWFP	Balochistan	Spl AREA	
1.	Rural Roads	KM	5209	2096	1718	977	-	10,000
2.	Rural Education							
	i) Primary education for rural area	Additional Children in Million	2.130	1.014	0.834	0.260	-	4.2
	ii) Teacher training in rural areas	Nos.in million	0.109	0.004	0.036	0.021	0.04	0.21
	iii) Non formal education	Nos. in million	3.125	1.257	1.032	0.586	-	6.0
3.	Rural Health							
	i) Basic Health Unit							
	a) Improvement of Existing BHUs	Nos.	2350	50	700	350	424	3874
	b) Construction of Additional BHUs	Nos.	30	81	120	20	1	252
	ii) Rural Health Centre							
	a) Improvement of Existing RHCs	Nos.						
	b) Construction of Additional RHCs	Nos.	5	-	-	40	-	45
	iii) Dispensaries	Nos	193	78	63	36	-	370
	iv) Immunization Programme	Children	95%	90%	90%	90%	-	-
		Mother	90%	90%	90%	90%	-	-
	v) Village Health Workers	Nos.						33000
4.	Village Electrification	No. of Villages						19700
5.	Rural Water Supply and Sanitation							
	i) Rural Water Supply	Additional Pop. to be served in Million	15.64	3.23	4.52	2.14	1.88	27.41
	ii) Rural Sanitation	-do-	11.76	0.98	4.01	1.58	0.48	18.81
6.	Population Welfare	Additional Accepters	1.07	0.43	0.35	0.21	-	2.06

Table-III-1.1

Actual and Projected Targets for Crops Production

CROPS/ITEMS	1987-88 ACTUAL	1992-93 ACTUAL	BENCH MARK EIGHTH PLAN 1992-93	1997-98 TARGETS	(000/Tonnes) ANNUAL GROWTH RATES(%)	
					7TH PLAN	8TH PLAN
Foodgrain	17471.0	21051.0	20059.0	24730.0	3.8	4.3
Wheat	12672.0	16157.0	15000.0	18250.0	5.0	4.0
Rice	3241.0	3116.0	3250.0	4250.0	(-)0.8	5.5
Basmati	943.0	1124.0	1150.0	1598.0	3.6	6.8
Others	2298.0	1992.0	2100.0	2652.0	(-)2.8	4.0
Maize	1127.0	1178.0	1210.0	1472.0	0.9	4.0
Others	428.0	600.0	599.0	758.0	7.0	4.8
Cash Crops	34562.0	39709.0	38198.0	48632.0	2.8	4.9
Cotton(Lint)	1463.0	1548.0	1972.0	2550.0	1.1	5.3
(Million Bales)	(8.6)	(9.1)	(11.6)	(15.0)		
Sugarcane	33029.0	38059.0	36000.0	46000.0	2.9	5.0
Tobacco	70.0	102.0	72.0	82.0	7.8	2.6
Pulses	560.0	567.0	780.0	962.0	(-)0.5	4.3
Gram	375.0	347.0	560.0	681.0	(-)1.5	4.0
Others	185.0	200.0	220.0	281.0	1.6	5.0
Oilseeds	3234.0	3442.9	4712.0	5833.0	1.3	4.4
i)Traditional						
Cottonseed	2926.0	3096.0	3944.0	5103.0	1.1	5.3
Rape & Mustard	204.0	206.9	250.0	300.0	0.3	3.7
Others	59.0	140.0	120.0	250.0	18.9	15.8
ii)Non-Traditional	45.0	60.5	90.0	180.0	6.1	15.0
Vegetables	3714.0	4805.0	4600.0	5560.0	5.3	3.9
Onion	633.0	854.0	750.0	957.0	6.2	5.0
Potato	563.0	933.0	900.0	1150.0	10.6	5.0
Other Vegetables	2518.0	3018.0	2950.0	3453.0	3.7	3.2
Fruits	3586.0	4112.0	4200.0	5511.0	2.8	4.0

Table-III-1.2

Actual and Projected Targets for other than Crop Sector

Major Programmes	Unit	1987-88	1992-93	1992-93	1997-98	Annual Growth Rate	
		Actuals	Actuals	Bench- mark	Targets	1988-93	1993-98
Fertilizer Offtake	'000' N Tonnes	1720	2148	2065	2730	4.5	5.7
Improved Seed Distribution	'000' Tonnes	100	88	138	260	(-)2.5	13.5
Operational Tractors (Cumulative)	Number	221300	224400	224400	241600	0.3	1.5
Government Storage Availability	'Mln' Tonnes	4.93	5.08	-	-	0.6	-
Livestock Products							
i) Meat	'000' Tonnes	1357	1795	1795	2484	5.8	6.7
ii) Milk	'000' Tonnes	13319	17120	17120	22039	5.1	5.2
iii) Eggs	'Mln' Number	4140	5379	5379	8448	5.4	9.4
iv) Hides	'Mln' Number	5.6	6.09	6.09	6.46	1.0	1.2
v) Skin	'Mln' Number	30.6	36.57	36.57	44.07	3.6	3.8
vi) Wool	'000' Tonnes	44.7	50.5	50.54	57.74	2.5	2.7
Forestry Products							
i) Timber	000' Cubic Mtrs	779	877	832	958	2.4	2.8
ii) Firewood	000' Cubic Mtrs	422	333	394	453	(-)4.6	2.8
	000' Cubic Mtrs	357	544	438	505	8.8	2.9
Fish Production							
i) Inland	'000' Tonnes	445	520	500	575	3.2	2.8
ii) Marine	'000' Tonnes	96	122	123	138	4.9	2.3
	'000' Tonnes	349	398	377	437	2.7	3.0

Table-III-1.3
Financial Allocation of Agriculture Section
for Eighth Plan
(Federal Projects)

		(Million Rupees)		
S.No.	Sub-SECTOR	Eighth Plan Allocation		
		ON-GOING PROJECTS	NEW PROJECTS	TOTAL
1.	Agri.Research	921.7	1166.6	2088.3
2.	Agri.Extension	146.1	18.2	164.3
3.	OilSeed Maximization Programme	297.4	0.0	297.4
4.	Agri.Marketing	10.9	50.0	60.9
5.	Agri.Education	551.0	285.0	836.0
6.	Improved Seed	0.0	100.0	100.0
7.	Agri.Economics & Statistics	66.6	50.0	116.6
8.	Soil And Fertilizer	42.0	116.4	158.4
9.	Plant Protection	0.0	18.0	18.0
10.	Soil Conservation & Land Dev.	7.1	0.0	7.1
11.	Livestock & Poultry Deveopment	51.0	197.0	248.0
12.	Forestry & Wildlife	343.9	420.0	763.9
13.	Range Management	49.1	0.0	49.1
14.	Fisheries	59.5	202.5	262.0
Total:Agriculture		2546.3	2623.7	5170.0
Subsidy on fertilizer		0.0	500.0	500.0

Table-III-2.1

Water Budget for the Eighth Five Year Plan: 1993-94 TO 1997-98 (Availability at Farm Gate)

SOURCE	B.M. 1992-93			1993-94			1994-95			1995-96			1996-97			1997-98			INCREMENT		
	K	R	T	K	R	T	K	R	T	K	R	T	K	R	T	K	R	T	K	R	T
A. SOURCE																					
1. Canal Withdrawals	38.37	22.44	60.81	38.37	22.44	60.81	38.37	22.44	60.81	38.37	22.44	60.81	38.37	22.44	60.81	38.37	22.44	60.81	-	-	0.00
2. C.R.B.C.	0.33	0.28	0.61	0.94	0.80	1.74	0.94	0.80	1.74	0.94	0.80	1.74	0.94	0.80	1.74	0.94	0.80	1.74	0.61	0.52	1.13
3. Pat Feeder Canal	-	-	-	0.07	0.05	0.12	0.07	0.05	0.12	0.07	0.05	0.12	0.07	0.05	0.12	0.07	0.05	0.12	0.07	0.05	0.12
4. Canal Remodelling	1.50	-	1.50	1.50	-	1.50	1.50	-	1.50	1.50	-	1.50	1.50	-	1.50	1.50	-	1.50	-	-	0.00
5. Command & OFWM	5.67	3.40	9.07	5.74	3.55	9.29	5.81	3.70	9.51	5.88	3.85	9.73	5.95	4.00	9.95	6.02	4.17	10.19	0.35	0.77	1.12
6. Small Dams	4.32	2.23	6.55	4.32	2.24	6.56	4.32	2.25	6.57	4.32	2.26	6.58	4.32	2.27	6.59	4.33	2.28	6.61	0.01	0.05	0.06
7. Hub Dam	0.04	0.02	0.06	0.04	0.02	0.06	0.04	0.02	0.06	0.04	0.02	0.06	0.04	0.02	0.06	0.04	0.02	0.06	-	-	0.00
8. Khanpur Dam	0.03	0.01	0.04	0.03	0.01	0.04	0.03	0.01	0.04	0.03	0.01	0.04	0.03	0.01	0.04	0.03	0.01	0.04	-	-	0.00
9. Canal Lining in Punjab	-	-	-	-	0.44	0.44	-	0.88	0.88	-	0.88	0.88	-	0.88	0.88	-	0.88	0.88	-	0.88	0.88
TOTAL (SURFACE WATER)	50.26	28.38	78.64	51.01	29.55	80.56	51.08	30.15	81.23	51.15	30.31	81.46	51.22	30.47	81.69	51.30	30.65	81.95	1.04	2.27	3.31
B. GROUNDWATER																					
1. 1. Private Tubewells @ 6000/Year	16.96	16.96	33.92	17.39	17.40	34.79	17.82	17.84	35.66	18.25	18.28	36.53	18.68	18.72	37.40	19.11	19.16	38.27	2.15	2.20	4.35
2. 2. SCARP Tubewells	5.56	5.57	11.13	5.56	5.57	11.13	5.56	5.57	11.13	5.56	5.57	11.13	5.56	5.57	11.13	5.56	5.57	11.13	-	-	-
3. 3. Other Public TW @ 217/Year	0.71	0.72	1.43	0.76	0.77	1.53	0.81	0.82	1.63	0.86	0.87	1.73	0.91	0.92	1.83	0.96	0.97	1.93	0.25	0.25	0.50
TOTAL (GROUNDWATER)	23.23	23.25	46.48	23.71	23.74	47.45	24.19	24.23	48.42	24.67	24.72	49.39	25.15	25.21	50.36	25.63	25.70	51.33	2.40	2.45	4.85
GRAND TOTAL	73.49	51.63	125.12	74.72	53.29	128.01	75.27	54.38	129.65	75.82	55.03	130.85	76.37	55.68	132.05	76.93	56.35	133.28	3.44	4.72	8.16

Where: K=Khanif R=Rabi T=Total Q=Discharge F=Utilization Factor L=Watercourse Losses W=Annual
Puppage with Losses CHW=Canal Head Withdrawal

III. WATER STORAGE

Chashma = 0.30 MAF (0.30 at Farmgate)
Mangla = 5.30 MAF (3.13 at Farmgate)
Tarbela = 9.30 MAF (4.71 at Farmgate)

II. GROUND WATER

Private T.W. (Q=1.05 cfs; F=20%) L=5% WA = 145 AF
SCARP T.W. (Q=2.00 cfs; F=50%) L=15% WA = 615 AF
Other Public T.W. (Q=1.50 cfs; F=50%) L=15% WA = 461 AF
(Q=1.00 cfs; F=50%) L=15% WA = 307 AF

I. CANAL WATER
Canals & Distributaries = 25% of CHW
Sanctioned Watercourses = 15% (25% of Outlet)
Subtotal = 40%

Table-III-2.2

Eighth Plan : Physical Targets

Sub-Sector	Unit	Targets
Water Availability	MAF (MHM)	133.28 (16.44)
Additional Area Irrigated	MAC (MHA)	1.70 (0.69)
Area Protected (Disasterous)	MHA	1.40
SCARP Tubewells	NO	1,600
Surface Drains	MCM (KM)	140 (2141)
Tile Drains	HA	208,013
Transition of SCARP Tubewells	NO	8,000
Watercourses Improvement	NO	10,000
Precision Land Levelling	HA	55,000
Flood Control		
- Earth Work	MCM	50.60
- Stone Work	MCM	5

MAF: Million Acre Feet
MCM: Million Cubic Meter
MHM: Million Hectare Meter

Table-III-2.3
Annual Phasing of Physical Works

Physical Targets	Unit	Total	1993-94	1994-95	1995-96	1996-97	1997-98
1. Area Protected	MAC	1.40	0.23	0.25	0.28	0.32	0.32
2. SCARP TWS	NO	1600	259	291	316	367	367
3. Surface Drains	MCM	140	23	25	28	32	32
4. Tile Drains	HA	208014	33731	37830	41071	47756	47626
5. Transition of SCARP TWS	NO	8000	1297	1455	1580	1836	1832
6. Watercourse Improvement	NO	10000	2409	2247	1970	1487	1887
7. Precision land levelling	HA	55000	13256	12356	10833	8177	10378
8. Flood Control							
- Earth Work	MCM	50.60	8.29	9.12	10.03	11.03	12.13
- Stone Work	MCM	5.00	0.82	0.90	0.99	1.09	1.20
9. Additional Area	MAC	1.63	0.58	0.33	0.24	0.24	0.24
- Irrigated	MHA		(0.234)	(0.133)	(0.097)	(0.097)	(0.097)

Table-III-2.4
Financial Allocations
(Federal, at 1993-94 prices)

(Rs. Billion)

	1993-94	1994-95	1995-96	1996-97	1997-98	Total
1. DRAINAGE & RECLAMATION						
PUNJAB						
On-going	1.323	1.772	0.867	0.380	0.308	4.650
New	0.040	0.044	1.064	1.560	1.612	4.320
Sub-total(Punjab)	1.363	1.816	1.931	1.940	1.920	8.970
SINDH						
On-going	3.180	3.501	3.931	2.983	3.434	17.029
New	0.000	0.159	1.998	2.662	3.178	7.997
Sub-total(Sindh)	3.180	3.660	5.929	5.645	6.612	25.026
N.W.F.P.						
On-going	0.604	0.664	0.526	0.577	0.628	2.999
New	0.000	0.000	0.260	0.605	0.590	1.455
Sub-total(N.W.F.P.)	0.604	0.664	0.786	1.182	1.218	4.454
BALUCHISTAN						
On-going	-	-	-	-	-	-
New	0.000	0.000	0.165	0.182	0.200	0.547
Sub-total(Baluchistan)	0.000	0.000	0.165	0.182	0.200	0.547
Total (D&R)						
On-going	5.107	5.937	5.324	3.940	4.370	24.678
New	0.040	0.203	3.487	5.009	5.580	14.319
(Total: On-going+New)	5.147	6.140	8.811	8.949	9.950	38.997
2. IRRIGATION						
a. CRBC & Pat Feeder Canals	1.970	1.950	3.475	3.141	2.050	12.586
b. Mirani Dam (Federal)	0.000	0.042	0.158	0.305	0.392	0.897
Total (IRRIGATION)	1.970	1.992	3.633	3.446	2.442	13.483
3. PLANNING & INVESTIGATION	0.110	0.058	0.134	0.156	0.235	0.693
4. FLOOD CONTROL PROGRAMME	0.718	0.360	0.396	0.436	0.480	2.390
5. SURVEY OF PAKISTAN	0.000	0.001	0.002	0.002	0.002	0.007
TOTAL (FEDERAL)	7.945	8.551	12.976	12.989	13.109	55.570

Table-III-2.5
Portfolio of Projects with Financial Allocations

(Rs. Million)

Name of Project	Total Cost	Expenditure upto JUNE, 1993	Throwforward for 8th Plan	8th Plan Allocation (at 1993-94 prices)				Total	Throw-forward				
				1993-94	1994-95	1995-96	1996-97						
Drainage and Reclamation													
A. Punjab (Ongoing)													
1. Drainage-IV	1590	1497	93	179	-	-	-	179	0				
2. Hadali SCARP	589	444	133	29	47	57	-	133	0				
3. Fordwah Sadiqia-I	1305	803	502	110	350	42	-	502	0				
4. Fordwah Sadiqia (South & North)	4000	44	3956	140	235	175	215	1015	2941				
5. Gojra Khewra-II	268	180	88	29	59	-	-	88	0				
6. Sukh Bias-I	349	269	80	51	29	-	-	80	0				
7. Khushab SCARP	1009	260	749	180	300	160	109	749	0				
8. Shorkot Kamalia (SGW)	296	181	115	59	56	-	-	115	0				
9. Upper Rechna Remaining	231	148	83	37	46	-	-	83	0				
10. Private Tubewells Development	1140	591	549	235	314	-	-	549	0				
11. SCARP Transition	531	23	508	184	108	216	-	508	0				
12. Project Planning	1147	-	1147	50	52	54	56	270	877				
13. SCARP D.G.KHAN	178	67	111	29	82	-	-	111	0				
14. SCARP-VI (2nd Rev)	4083	3785	268	11	94	163	-	268	0				
Sub-Total Punjab (Ongoing)				16716	8292	8382	1323	1772	867	380	308	4650	3818
Punjab (New)													
1. D.G.Khan (SGW)-II	1100	-	-	-	-	150	175	200	525	575			
2. Sukh Base-II	2500	-	-	-	-	130	160	195	485	2015			

Table-III-2.5
Portfolio of Projects with Financial Allocations

NAME OF PROJECT	Total Cost	Expenditure upto June, 1993	Throwforward for 8th Plan	8th Plan Allocation (at 1993-94 prices)					Total	Throw-forward
				1993-94	1994-95	1995-96	1996-97	1997-98		
4. Larkana Shikarpur Surface Drainage	234	-	-	-	112	99	-	-	211	0
Sub-Total Sindh (New)	29403	-	-	0	159	1998	2662	3178	7997	21383
Total Sindh (Ongoing+New)	56664	6431	18377	3180	3660	5929	5645	6612	25026	22731
C. N.W.F.P. (On-going)										
1. Swabi SCARP	3620	359	3261	320	550	500	550	600	2520	741
2. Chashma Command Area Development Project (Drainage)	1128	776	352	262	90	-	-	-	352	0
3. Project Planning	323	-	323	22	24	26	27	28	127	196
Sub-Total NWFP (Ongoing)	5071	1135	3936	604	664	526	577	628	2999	937
N.W.F.P. (New)										
1. Bannu SCARP Phase-II	236	-	-	-	-	80	80	76	236	0
2. Pehur SCARP	224	-	-	-	-	75	75	74	224	0
3. Kafur Dheri SCARP Phase-II	315	-	-	-	-	105	145	65	315	0
4. Doaba Daud Zai SCARP	480	-	-	-	-	-	180	200	380	100
5. Peshawar SCARP (Remaining)	300	-	-	-	-	-	125	175	300	0
Sub-Total NWFP (New)	1555	0	-	0	0	260	605	590	1455	100
Total NWFP (Ongoing + New)	6626	1135	3936	604	664	786	1182	1218	4454	1037
D. BALOCHISTAN (New)										
1. Drainage of Khirthar	725	-	-	-	-	78	98	121	297	428
2. Drainage of Lasbela Canal Command	300	-	-	-	-	40	45	50	135	165

Table-III-2.5
Portfolio of Projects with Financial Allocations

(Rs. Million)

NAME OF PROJECT	Total Cost	Expenditure upto JUNE, 1993	Throwforward for 8th PLAN	8th PLAN Allocation (at 1993-94 prices)					Total	Throw-forward
				1993-94	1994-95	1995-96	1996-97	1997-98		
3. Small Drainage Scheme										
i) Haroon Bent Khuzdar	100	-	-	-	-	14	16	18	48	52
ii) Zidi Area Khuzdar	40	-	-	-	-	8	10	-	18	22
iii) Joe-Noora Wadh	25	-	-	-	-	5	2	-	7	18
iv) Bareja, Kachi	10	-	-	-	-	-	-	-	0	10
v) Maikhtar, Loralai	10	-	-	-	-	-	-	-	0	10
vi) KK Bund Command Pishin	40	-	-	-	-	10	-	-	10	30
4. Project Planning	100	-	-	-	-	10	11	11	32	68
Sub-Total Balochistan(New)	1350	0	-	0	0	165	182	200	547	803
Total (Ongoing)	49048	15858	30695	5107	5937	5324	3940	4370	24678	6103
Total (New)	43494	0	-	40	203	3487	5009	5580	14319	29152
Total(Drainage)	92542	15858	30695	5147	6140	8811	8949	9950	38997	35255
IRRIGATION (On-going)										
1. Pat Feeder Canal	6879	795	6084	1350	1200	1783	1491	300	6124	-40
2. Chashma Right Bank Canal, II & III	10213	3751	6462	620	750	1692	1650	1750	6462	0
3. Mirani Dam Project	4985	-	-	-	42	158	305	392	897	4088
Total (Irrigation)	22077	4546	12546	1970	1992	3633	3446	2442	13483	4048
PLANNING & INVESTIGATION										
1. International waterlogging and Salinity Research Institute	267	16	251	22	10	60	70	89	251	0
2. Pakistan Snow & Ice Hydrology Project	101	77	24	10	9	5	-	-	24	0

Table-III-2.5

Name of Project	Total Cost	Expenditure upto JUNE, 1993	Throwforward for 8th Plan	8th Plan Allocation (at 1993-94 prices)				Total	Throw-forward	
				1993-94	1994-95	1995-96	1996-97			
3. Investment Project Preparation in Water Sector Umbrella-II.	67	18	49	22	14	13	-	-	49	0
4. SCARP Monitoring of Salinity Control & Reclamation Project	128	119	9	9	-	-	-	-	9	0
5. Others (ACOP, Groundwater Exploration, etc)	359	-	359	47	25	56	86	146	359	0
Total (P & I)	922	230	692	110	58	134	156	235	692	0
FLOOD CONTROL PROGRAMME										
1. Punjab	1150.00	-	-	325.00	159.15	175.05	192.53	211.76	1063.49	86.51
2. Sindh	800.00	-	-	229.00	110.72	121.77	133.93	147.31	742.73	57.27
3. N.W.F.P.	275.00	-	-	83.00	38.06	41.86	46.04	50.64	259.60	15.40
4. Balochistan	200.00	-	-	56.00	27.68	30.44	33.48	36.83	184.43	15.57
5. AJK & NA	50.00	-	-	0.40	6.92	7.61	8.37	9.21	32.51	17.49
6. FATA	25.00	-	-	0.60	3.46	3.81	4.19	4.60	16.65	8.35
7. Federal Flood Commission, Flood Forecasting & Warning & unforeseen	100.00	-	-	24.00	14.41	15.86	17.44	19.19	90.90	9.10
Total (Floods)	2600.00	-	-	718.00	360.40	396.39	435.98	479.54	2390.32	209.68
1. Survey of Pakistan	10.00	-	-	-	1.00	2.00	2.00	2.00	7.00	3.00
GRAND TOTAL (FEDERAL)	118191.32	20634.00	43973.32	7944.73	8550.93	12976.30	12988.73	13108.54	55569.23	41988.09

Table-III-3.1
Industrial Production Targets

ITEMS	UNITS	1992-93 (ESTIMATES)	1997-98 (PROJECTIONS)	ANNUAL GROWTH RATE
Sugar	'000' M.T.	2395	3650	8.8
Veg. Ghee and Oil	'000' M.T.	800	1120	7.0
Tea Blended	'000' M.T.	600	705	3.3
Beverage(Million)	Bottles	1153	1385	3.7
Cigarettes(Million)	Numbers	30	35	3.1
Textiles.				
Cotton Yarn	Million Kgs.	1219	1800	8.1
Cotton Cloth	Mill.Sq.Mtrs	317	415	5.5
Woollen Blankets	'000' Nos.	904	1620	12.4
Jute Goods	'000' M.T.	97	139	7.5
Cotton ginning	Min.Bales	9	15	10.8
Paper & Board	'000' M.T.	264	380	7.6
Chemicals				
Fertilizers				
i) Nitrogenous	'000' N.Tons.	1227	1974	10.0
ii) Phosphatic	'000' N.Tons.	105	243	18.3
Soda Ash	'000' M.T.	186	285	8.9
Caustic Soda.	'000' M.T.	81	124	8.9
Matches(Million)	Boxes	4900	9643	14.5
Cement	'000' M.T.	8558	12970	8.7
Engineering Goods				
Air conditioners	'000' Nos.	15	50	27.2
Electric Motors	'000' Nos.	33	48	7.8
Refrigerators	'000' Nos.	154	480	25.5
T.V	'000' Nos.	162	206	4.9
Transport Equipment				
Bicycles	'000' Nos.	574	840	7.9
Trucks/Buses	'000' Nos.	4	8	14.9
Motor Car/LCVs/Jeeps	'000' Nos.	39	72	13.0
Tractors	'000' Nos.	17	30	12.0
Motors Tyres	'000' Nos.	712	1686	18.8
Motor Tubes	'000' Nos.	550	780	7.2
Petroleum Products	Min.Ltrs.	7610	11395	8.4
Basic Steel				
Billets	'000' M.T.	338	760	17.6
Rolled Sheets	'000' M.T.	656	812	4.4

Table-III-3.2
List of Projects for Eighth Five Year Plan (1993-98)

(Rs. Million)

S.No.	Name of Ministry/Division/ Corporation/Project	Estimated Cost		Expenditure upto June,93	Eighth Plan allocation (1993-98)			Total
		Total	F.Aid/FEC		Ministry	Public Corporation	Total Corporation	
					Budget	Budget	Outside	Columns (6+7+8)
1	2	3	4	5	6	7	8	9
A. PRODUCTION DIVISION								
State Engineering Corporation								
1.	Heavy Electrical Complex, Kot Najibullah, NWFP.	900.30	346.30	755.30	0	145	0	145.0
Pakistan Steel Mills Corporation								
2.	Expansion of Pakistan Steel Mills from 1.1 to 1.5 Million Tons per year.	1500.0	862.0	480.0	0	0	1020	1020
TOTAL (MINISTRY OF PRODUCTION)					0	145	1020	1165
B. MINISTRY OF INDUSTRIES								
3.	Modernization of CTL, Karachi and Lahore.	55	33.5 (UNDP)	18	38	0	0	38
4.	Others R&D/Training Projects. (on going and new)				120	0	0	120
5.	Expansion & Modernization of Utility Stores Corporation. (Bank Borrowing)				0	0	500	500
TOTAL (MINISTRY OF INDUSTRIES)					158	0	500	658
C. MINISTRY OF COMMERCE								
6.	Foreign Trade Institute of Pakistan.	27	-	0.00	27	0	0	27
TOTAL (MINISTRY OF COMMERCE)					27	0	0	27
D. PLANNING & DEVELOPMENT DIVISION								
7.	Industrial/Commercial Research & Data Bank (Industries & Commerce)	5	4 (UNDP)	-	5	0	0	5
TOTAL (PLANNING & DEV. DIVISION)					5	0	0	5
GRAND TOTAL FEDERAL (EXCLUDING SPECIAL AREAS)					190	145	1520	1855

Table-III-4.1

Proposed Investment for 8th Five Year Plan(1993-98)
(MINERAL)

(SUMMARY)				(Million Rs.)	
Sr.No.	NAME OF AGENCY/DEPARTMENT	ESTIMATED COST		Expend. upto JUNE, 1993	8th PLAN PROVINCIAL
		Total	F.Aid/FEC		
1	2	3	4	5	6
					6626.405
I. FEDERAL : (A-B)					
A.	MINISTRY OF PETROLEUM AND NATURAL RESOURCES (M/O P&NR)	12718.765	6820.834	5816.960	6616.405
A.1.	Geological Survey Of Pakistan (GSP)	1356.405	508.224	15.000	1056.405
A.2.	Pakistan Minerals Development Corporation (PMDC)	172.360	92.610	101.960	70.000
A.3.	Resources Development Corporation (RDC)	11190.000	6220.000	5700.000	5490.000
B.	PLANNING AND DEVELOPMENT DIVISION (P&D DIV.)	10.000	9.000	0.000	10.000
		515.060	97.980	96.710	570.000
II. PROVINCIAL : (C-F)					
C.	PUNJAB	50.000	10.000	0.000	50.000
D.	SINDH	71.710	0.000	1.710	70.000
E.	N W F P	313.350	27.980	95.000	220.000
F.	BALUCHISTAN	80.000	60.000	0.000	230.000
GRAND TOTAL MINERALS (FED. + PROV.)					7196.405**

* Rs 2.7 billion already incurred upto 1991-92

Rs 3.0 billion likely to incurr in 1992-93

** Excluding Special Areas

Table-III-4.1
Mineral Sector - Proposed Investment (Detail)

(Rs. Million)

Sr.No.	NAME of AGENCY/PROJECT	ESTIMATED COST		EXPEND. upto JUNE 1993	8th PLAN PROVISION
		TOTAL	F.Aid/FEC		
1	2	3	4	5	6

FEDERAL (I-II)**6626.405****I. MINISTRY OF PETROLEUM AND NATURAL
RESOURCES : (A-D)****6321.405****A. Geological Survey Of Pakistan (GSP)****831.405**

A.1. Establishment of Economic Evaluation Division in Geological Survey of Pakistan (1993-98)	216.405	38.224	0.000	216.405
A.2. Massive and Porphyry type sulphide deposits associated with volcanogenic rocks in Balochistan, NWFP FATA & Northern Areas. Evaluation of Porphyry deposits and exploration for massive Laboratories at Peshawar, Lahore and Karachi.	80.000	0.000	15.000	50.000
A.7. Iron and Gold Mineralization in Shield rocks in Punjab.	50.000	0.000	0.000	25.000
A.8. Chromite & Platinum mineralization associated with ultramafic rocks in Balochistan, NWFP & Northern Areas.	50.000	0.000	0.000	25.000
A.9. Phosphorite deposits associated with sedimentary rocks in Balochistan Province.	50.000	0.000	0.000	35.000
A.10. Industrial rocks & minerals: Assessment for use in housing, roads & Industrial Sector.	50.000	0.000	0.000	30.000
A.11. Geo-science Training & Research Centre Islamabad.	450.000	400.000	0.000	450.000
B. Pakistan Minerals Development Corporation				70.000
B.1. Duddar Lead-zinc Pre-feasibility Study Lasbela, Balochistan (UNDP Aided - revised approved project	140.700	91.000	96.700	44.000
B.2. Exploration and evaluation of Lead-Zinc and Barite Deposits in Dhamjhal, District Lasbela, Balochistan. (Approved by CDWP on 28.03.1990)	23.640	1.370	0.000	23.000
B.3. Exploration of Precious Metals in Dhani Chahla Bandi and Reshian, Azad Kashmir (Approved by DDWP on 15.02.1990)	8.020	0.240	5.260	3.000

Table-III-4.1
Mineral Sector - Proposed Investment (Detail)

						(Rs. Million)
Sr.No.		NAME of AGENCY/PROJECT	ESTIMATED COST		EXPEND. upto JUNE 1993	8th PLAN Provision
			Total	F.Aid/FEC		
1		2	3	4	5	6
						5490.000
		C. Resources Development Corporation			*	
		C.1. Saindak Copper-Gold Project, Distt. Chagai, Balochistan. (Original project approved on 31.12.1989 at a total cost of Rs 6001 million & revised in Special CDWP meeting)	11190.000	6220.000	5700.000	5490.000
						10.000
		II. PLANNING AND DEVELOPMENT DIVISION.				
		D. Technical Assistance for Mineral Advisory Services.	10.000	9.000	0.000	10.000
						570.000
		PROVINCIAL : (III-VI)				50.000
		III. PUNJAB				50.000
		E. Punjab Minerals Development Corporation (PUNJMIN DC)				50.000
		E.1 Exploration and evaluation of iron ore in Chiniot Areas, District Jhang.	50.000	10.000	0.000	50.000
						70.000
		IV SINDH				70.000
		F. Directorate of Mineral Dev. Sindh				5.000
		F.1 Mineral Identification and subsequent evaluation of selected mineral deposits in Dadu and Tharparkar District.	6.170	0.000	1.170	5.000
		F.2 Construction of Road from Mithi to Nagarparkar (86 miles) Distt. Tharparkar.	30.000	0.000	0.000	30.000
		F.3 Celestite mining and processing plant at Surgan.	30.000	0.000	0.000	30.000
		F.4 Evaluation and Monitoring of Mineral Development - Sindh Province	5.540	0.000	0.540	5.000
						220.000
		V NWFP. (G+H)				100.000
		G. Dir. Of Minerals Dev. - NWFP.				100.000
		G.1 Detailed survey/investigation of Mineral Bearing areas and feasibility thereof and infrastructure support. Technical Training Institute for Mineral/Mining.	100.000	0.000	0.000	100.000

Table-III-4.1
Mineral Sector - Proposed Investment (Detail)

(Rs. Million)					
Sr.No.		NAME OF AGENCY/PROJECT	ESTIMATED COST		8th PLAN Provision
			Total	F.Aid/FEC	
1		2	3	4	5
					6
		H. Sarhad Development Authority			<u>120.000</u>
		H.1 Rock Phosphate Exploration project PC.II	15.000	0.000	0.000
		H.2 Lagarban-Tarnwai Eastern Phosphate Mining Project PC.I.	178.350	25.980	95.000
		H.3 Exploration of Chromite in Malakand Ultramafic Belt, PC-II.	20.000	2.000	0.000
		VI. BALOCHISTAN (I + J)			<u>230.000</u>
		I. Dir. of Mineral Dev. - Baluchistan			<u>100.000</u>
		I. Infrastructure facilities in industrial mining areas.			100.000
		J. Balochistan Development Authority			<u>130.000</u>
		J.1 Exploration/Development of Gold Potential in Chagai Hills and Siah-Reg areas in Western Balochistan in collaboration with BHP-Minerals of Australia.			50.000
		J.2 Preparation of Pre-feasibility report of the deposits and integrated project of mining, beneficiation and smelting of Gunga Zinc-Lead near Khuzdar, Balochistan.	80.000	60.000	0.000
		GRAND TOTAL MINERALS (FED.+PROV.)			<u>7196.405</u>

* *Rs.2.7 billion already incurred upto 1991-92.*
Rs.3.0 billion is likely to incur upto 1991-92.

Table - III - 4.2
Minerals Production Targets

SL.NO.	ITEMS	UNITS "000"	7th Plan Production Estimates for (1992-93)	8th Plan Targets (1997-98)	Annual Growth Rate (%)
1	2	3	4	5	6
		Tonnes			
1.	Copper (Blister)	"	-	15	-
2.	Gold	"	-	1.47	-
3.	Silver	"	-	2.76	-
4.	Chromite	"	33	50	8.7
5.	China clay	"	47	100	16.3
6.	Gemstones(Ruby, Emerald)	Carats Tonnes	-	200	-
7.	Graphite	"	-	15	-
8.	Magnesite	"	-	20	-
9.	Marble/Aragonite	"	305	740	19.4
10.	Rock Phosphate	"	40	100	20.1
11.	Rock Salt	"	809	1000	4.4
12.	Dolomite	"	155	300	14.2
13.	Gypsum(Anhydrite)	"	483	1000	15.7
14.	Limestone	"	9685	12000	4.5
15.	Silica sand	"	147	450	25.0
16.	Soap stone	"	34	100	24.0

Sources: (i) Statistical Bulletin, Federal Bureau Of Statistics
(ii) Detailed Annual Plans, Planning Commission
(iii) Economic Surveys, Finance Division
(iv) Seventh Five Year Plan (1988-93)
(v) M/O P & N R

Table-III-5.1

Science and Technolog Sector

List of Projects

(Rs. Million)

S.No.	Name of the Projects	8th Plan Allocation
1.	2.	3.

A.MINISTRY OF SCIENCE AND TECHNOLOGY

Main Ministry

On going Schemes

1.	Development of S&T Manpower in High Technology Fields Phase-I	58.0
2.	Development of S&T Manpower in High Technology fields Phase-III	800.0
3.	Centre for Advanced Molecular Biology Project	18.0
		<u>876.0</u>

New Schemes

1.	Feasibility studies and equity participation for the following projects: Microchips, Electronic Components, Solar panels based on PVC Cells, Personal Computers, New & composite materials and Genetic Engineering	200.00
2.	Upgradation of facilities for research and development in Applied Molecular Biology (Genetic Engineering)	72.00
3.	Direct gene transfer for Microbial DNA to higher Plants.	5.00

4.	Research projects for health, industry agriculture, energy sector, etc.	25.00
5.	Academy for S&T Planning and Management.	20.00
6.	Post Doctoral Fellowship Programme	10.00
7.	Implementation of Technology Policy and its associated Projects	250.00
8.	Minor Projects (MOST)	50.00
9.	National University of Science & Technology	200.00
		<hr/>
		Total (new): 832.00
		<hr/>
		Total(Ministry Main): 1708.00
		<hr/>

B. PAKISTAN COUNCIL FOR SCIENTIFIC & INDUSTRIAL RESEARCH (PCSIR)

On going Schemes

1.	Balancing & Modernization of PCSIR Labs, Centres and Institutes	264.00
2.	Establishment of Industrial Electronics Section at PSTC	28.50
3.	Establishment of Medicinal Botany Centres, Peshawar	43.00
4.	Establishment of Technical Training Centre in PSTC PSTC for Precision Control Instrumentation & Engineering	27.50
5.	Establishment of Technical Training Centre in PSTC for Precision Mechanical and Instrument Technology at Quetta.	15.00
6.	Establishment of PCSIR Labs Quetta	36.00
7.	Minor projects of PCSIR	40.00
		<hr/>
		Total (On going): 454.00
		<hr/>

New Schemes

1.	The Institute of Oil and Fats Technology	30.00
2.	Establishment of Scientific Equipment Development and Maintenance Facilities of Applied Physics, Computers and Instrumentation Centres, PCSIR Labs Complex, Lahore.	15.00
3.	Environmental Protection Laboratory	30.00
4.	Establishment of Precision Mechanical and Instrument Technology Centre at PCSIR Campus, Lahore	30.00
5.	Establishment of Technical Training Centre for Precision Mechanical and Instrument Technology, Peshawar.	30.00
6.	Development of Information and Technologies for Utilization of Solar and other Renewable Energies	45.00
7.	Development of Technology for Composite Materials	10.00
8.	Development of Herbicides, Biopesticides and Bio-fertilizers, Polymer Soil Conditioners and super Absorbent Polymers.	30.00
9.	Development of dyes and dye intermediates	10.00
10.	Development work in Minerals, Metals and Alloys	10.00
11.	Development of Fuel Technologies (FRC)	10.00
12.	Development of Leather Technologies	12.00
13.	Industrial Technology Development Centre, PCSIR	50.00
14.	Pilot Plant Studies for Optimization of indigenous Processes and Technologies	50.00
15.	Establishment of Institute of Monodiscipline Mineral Technology, Lahore.	35.00
16.	Minor Projects	40.00
Total (new):		<u>437.00</u>
Total (PCSIR):		<u>891.00</u>

**C. PAKISTAN COUNCIL FOR RESEARCH
IN WATER RESOURCES (PCRWR)**

On going Schemes

1.	Water Resources Research Centres	20.50
2.	Irrigation Systems Management Programme	43.90
3.	Qadriabad Balloki Link Canal	11.00
4.	Minor Projects	10.60
Total (On going)		<u>86.00</u>

New Schemes

1.	Water Resources Research Centres, Peshawar and Karachi	10.00
2.	Tile Drainage Research Projects	10.00
3.	Establishment of Remote Sensing Unit at Islamabad	10.00
4.	Drip and sprinkler Irrigation Dissemination Projects.	15.00
5.	Strengthening and Improvement of Water and Soil Analysis Laboratories	10.00
6.	Strengthening of the Research (Equipment and Aids) capabilities of the Council and its outfits	10.00
7.	Water Resource Management Institute of Pakistan	15.00
8.	Seepage Control Studies	5.00
9.	Hydrological Research Institute of Pakistan	20.00
10.	Construction of Water Resources Research Building in Islamabad	15.00
11.	Pakistan Journal of Water Resources, Water Resources Abstracts, Bulletins, Union Catalogue of Periodicals in Water of Environment and Bibliographic Services.	10.00

12. Minor Projects	10.00
	<hr/>
Total (new)	140.00
	<hr/>
Total (PCRWR):	226.00
	<hr/>

D. PAKISTAN COUNCIL FOR APPROPRIATE TECHNOLOGY

On going Schemes

1 Development and Dissemination of Fuel Efficient Cooking Technologies	41.00
2. Minor Projects	1.00
	<hr/>
Total (on going)	42.00
	<hr/>

New Schemes

1. Micro Hydle Power Plants	10.00
2. Wind Energy Dissemination	5.00
3. Biogas Plants	5.00
4. Fuel Efficient Cookstoves Phase-II	5.00
5. Biomass Utilization (Briqueting etc)	5.00
6. Dissemination of Appropriate Technologies in Buildings, Roads, preservation of foods etc.	15.00
7. Dissemination of solar water heater in cold areas.	10.00
8. Strengthening of PCAT	5.00
9. Development\Dissemination of Income Generating/Other Technologies	10.00
10. Minor Projects	10.00
	<hr/>
Total (new)	80.00
	<hr/>
Total (PCAT)	122.00

E. PAKISTAN MEDICAL RESEARCH COUNCIL**New Schemes**

1.	Conduct of Essential National Health Research (ENHR)	10.00
2.	Hospital management and Research Institute	25.00
3.	Study, Research and Establishment of Bone Marrow Transplant facilities.	10.00
4.	Research and Dissemination of New Surgical and Medical Techniques in selected Hospitals	15.00
5.	Pharmaceutical and Quality Control Laboratory (private sector collaboration)	15.00
6.	Minor Projects	5.00
Total (PMRC)		<u>80.00</u>

F. PAKISTAN COUNCIL FOR SCIENCE & TECHNOLOGY**New Schemes**

1.	Establishment of UNISTECH	45.0
2.	Establishment of Information and Statistics Division (PCST)	5.0
3.	Strengthening of Science Library in PCST	5.0
4.	Minor projects	5.0
Total(PCST):		<u>60.0</u>

G. COUNCIL FOR WORKS AND HOUSING RESEARCH**On going Schemes**

1.	Establishment of National Building Research Institute, Karachi.	10.0
2.	Minor Projects	1.0
Total (on going)		<u>11.0</u>

New Schemes

1.	Establishment Earthquake Engineering Laboratory Facility in collaboration with University of Engineering and Technology Lahore.	15.0
2.	Mobile Testing Laboratory for Concrete Soil	10.0
3.	Other Projects	25.0
		<hr/>
Total (new)		50.0
		<hr/>
Total(CWHR)		61.0
		<hr/>

PAKISTAN SCIENCE FOUNDATION**On going Schemes**

1.	Establishment of Pakistan Museum of Natural History	33.00
2.	Construction of Pakistan Science Foundation Building, Islamabad.	8.00
3.	Minor Projects	5.00
		<hr/>
Total (on going)		46.00
		<hr/>

New Schemes

1.	Pakistan Science Abstract, Technology Information Bulletin, Union Catalogue of S&T Periodicals and Bibliographic Service.	10.00
2.	Establishment of Satellite Data Link or Packet Switched Networking of S&T/R&D Organizations for S&T Information Interchange.	5.00
3.	Expansion of Reprographic Facilities at PASTIC.	3.00
4.	Strengthening of PASTIC National Science Reference Library.	3.00

5.	Upgradation of Pakistan Museum and National History.	5.00
6.	Minor Projects	10.00
	Total(new)	<u>36.00</u>
	Total(PSF)	<u>82.00</u>

I. NATIONAL INSTITUTE OF OCEANOGRAPHY

On going Schemes

1.	NIO Phase-II	5.00
2.	Pak-US Cooperative Programme in Oceanography of Arabian Sea	20.00
3.	Minor Projects	13.00
	Total (on going)	<u>38.00</u>

New Schemes

1.	Geological and Geophysical Mapping (Gloria Survey) of National Resources Exploration in Pakistan's Marine Area	15.00
2.	Geophysical and Geological investigation of the Indus Deltaic Region	15.00
3.	Sea bed Geomorphological Mapping of the inner shelf and creek system along the Indus Coast	10.00
4.	Geophysical and Geological Investigation of the Murray Ridge Area for the exploration of metallic minerals and hydrocarbons	20.00
5.	Pakistan Scientific Expedition to Antarctica	100.00
6.	Development of infrastructure and expertise for Marine Pollution studies and control.	10.00

7.	Survey and Exploration of Coastal and near Shore Mineral Resources	5.00
8.	Minor Projects	10.00
		<hr/>
Total (new)		185.00
		<hr/>
Total (NIO)		223.00

J. NATIONAL INSTITUTE OF ELECTRONICS

On going Schemes

1.	Electronic Industries Promotion Centre	15.00
2.	Electronic Instrumentation Laboratory	26.00
3.	Minor Projects	9.00
		<hr/>
Total (on going)		50.00
		<hr/>

New Schemes

1.	Soft-ware Development Centre	50.00
2.	Industrial Electronics Design and Development	30.00
3.	Bipolar IC Fabrication	20.00
4.	Semi-conductor Design and Processing Laboratory	20.00
5.	Technology Training Centre Tech-twon	50.00
6.	EIPC Expansion Programme	30.00
7.	Development Project on Consumer Electronics	30.00
8.	Product Development in electronics Communications	25.00
9.	Applied R&D in Defence Electronics	25.00
10.	Development of Infrastructure for Repair and Maintenance of High-Tech Instruments	30.00

11.	NIE Training Centre	20.00
12.	Minor Projects	<u>20.00</u>
	Total (new)	350.00
	Total (NIE)	<u>400.00</u>

K. NATIONAL INSTITUTE OF SILICON TECHNOLOGY

New Schemes

1.	To initiate the Research and Development activities for the studies and preparation of thick and thin films of amorphous silicon devices and solar cells.	10.00
2.	To extend the activities and facilities in NIST upto pilot plant level for commercialisation of solar cells in the country on single crystal basis	10.00
3.	Solar Bowl Technology Based Research Station for Power Generation (10 MW) (In collaboration with WAPDA and Solar Energy Research Centre Hyderabad)	50.00
4.	Up-gradation of NIST facilities	10.00
5.	Minor Projects	<u>5.00</u>
	Total (NIST)	<u>85.00</u>

L. NATIONAL INSTITUTE OF POWER

On going Schemes

1.	National Institute of Power Phase-II	<u>11.00</u>
	Total (on going)	<u>11.00</u>

New Schemes

1.	Electric Power Generation with Wind Mill	10.00
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2.	Fan Development Centres	5.00
3.	Micro Hydel for Canal-Falls	10.00
4.	Training Programme for Test Certification and Equipments for Quality Control and Testing	5.00
5.	Minor Projects	14.00
	Total (new)	44.00
	Total (NIP)	55.00

M. NATIONAL CENTRE FOR TECHNOLOGY TRANSFER

On going Schemes

1.	Consultancy Development Centre	12.00
	Total (on going)	12.00

New Schemes

1.	Integrated Technology and Industrial Information System (ITIIS)	10.00
2.	Creation of Essential Databases including Registry of Technology Transfer, Agreements and Patents.	10.00
3.	Minor Projects	20.00
	Total (new)	40.00
	Total (NCTT)	52.00
	Total (Ministry of Science & Technology)	5.00

N. PRIME MINISTER'S SECRETARIAT (Pakistan Atomic Energy Commission)

On going schemes

1.	National Institute of Bio-Tech & Genetic Engg. Faisalabad.	37.00
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2.	Flat Type R/C for PAEC Employees at Islamabad	50.00
	Total (on going)	<u>87.00</u>

New schemes

1.	Purchase of Radiotherapy Equipment at INMOL Lahore.	08.00
2.	Up gradation of KNPTC training programme	20.00
3.	Shifting of Nuclear Institute of Agriculture Tandojam.	25.00
4.	Ext. of AEARC, Tandojam	20.00
5.	Up-gradation of AEMC, Karachi.	15.00
6.	Upgradation of Nuclear Medical Centre (INMOL), Lahore.	30.00
7.	Upgradation of Institute of Radiotherapy & Nuclear Medical (IRNUM) Peshawar.	35.00
8.	Upgradation of Nuclear Medicine Oncology & Radiotherapy Institute (NORI) Islamabad.	58.00
9.	Upgradation of AEMC, Jamshoro.	50.00
10.	Lab. Bldg. Block-II, Faisalabad.	10.00
11.	Additional House at PINSTECH.	40.00
12.	Construction of Admn Library Block Male & Female Hostel at AEARC Tandojam.	10.00
13.	Construction of Perimeter wall around acquired area of PINSTECH.	10.00
14.	Minor projects	<u>10.00</u>
	Total (new)	<u>341.00</u>
	Total (PAEC)	428.00

P. METEOROLOGICAL DEPARTMENT (AVIATION DIVISION)**New schemes.**

1.	Establishment of Regional Meteorological Centres at Quetta and Peshawar.	05.00
2.	Radar Computerized Rainfall Estimation System and Calibration at FF & WC Lahore.	12.00
3.	Establishment of Agromet Centres Phase-II	10.00
4.	Modernization of Seismological Network	08.00
5.	Establishment of surface (Climatic) observatories at four places.	5.00
6.	Computer Data Processing Centre (CDPC)	7.00
7.	Minor projects	15.00
Total (Met.Dept.)		<u>62.00</u>

**Q. DIRECTORATE GENERAL OF NEW & RENEWABLE ENERGY RESOURCES
MINISTRY OF PETROLEUM AND NATURAL RESOURCES****New schemes**

1.	Harnessing of New and Renewable Energy Resources in the country.	45.00
2.	Procurement of equipment for rehabilitation of 18 solar/wind systems including installation of solar/biogas laboratory at head office.	20.00
Total(DGN&RER)		<u>65.00</u>

Total (Science and Technology) 4600.00

Table-III-6.1

Delivered Commercial Energy*

Delivered Commercial Energy											
Fuel	Residential	Commercial	Industry			Agriculture	Transport	Power	Other Govt.	Total	Total PTOE
			Total	General	Fertilizer						
GAS											
SHARES (%)											
1987-88	13.32	2.89	47.43	23.58	23.85	0.00	0.00	36.37	0.00	100.00	8337
1990-91	14.29	2.68	44.29	23.87	20.43	0.00	0.00	38.73	0.00	100.00	10269
1992-93	16.52	2.61	47.84	25.26	22.58	0.00	0.00	33.02	0.00	100.00	11075
1997-98	18.49	1.88	45.84	23.39	22.46	0.00	0.00	33.78	0.00	100.00	17354
GROWTH RATE (%)											
1988-93	10.51	3.73	6.03	7.32	4.69	0.00	0.00	3.82	0.00	5.84	
1993-98	11.89	2.50	8.47	7.72	9.28	0.00	0.00	9.90	0.00	9.40	
OIL											
SHARES (%)											
1987-88	9.83	0.35	11.87	11.87	0.00	11.73	35.23	15.82	3.31	100.00	8895
1990-91	10.58	0.39	10.85	10.85	0.00	15.78	36.01	23.15	3.23	100.00	10269
1992-93	4.37	0.38	9.75	9.75	0.00	12.59	36.92	23.63	2.59	100.00	11075
1997-98	3.82	0.34	10.01	10.01	0.00	10.18	34.15	29.29	2.19	100.00	17354
GROWTH RATE (%)											
1988-93	-10.45	7.38	1.24	1.24	0.00	6.79	6.29	14.10	0.26	5.30	
1993-98	4.22	4.72	7.62	7.62	0.00	2.59	5.39	11.74	3.46	7.05	
ELECTRICITY											
SHARES (%)											
1987-88	31.58	8.10	35.61	0.00	0.00	17.56	0.16	0.00	6.99	100.00	2048
1990-91	32.33	7.24	36.03	0.00	0.00	18.00	0.12	0.00	6.28	100.00	2551
1992-93	33.88	6.28	36.72	0.00	0.00	16.47	0.10	0.00	6.55	100.00	2976
1997-98	36.97	5.63	38.70	0.00	0.00	12.81	0.06	0.00	5.83	100.00	4885
GROWTH RATE (%)											
1988-93	10.58	5.42	9.71	0.00	0.00	7.64	-1.02	0.00	7.61	9.04	
1993-98	11.06	6.75	10.29	0.00	0.00	3.78	0.00	0.00	6.64	9.13	
COAL											
SHARES (%)											
1987-88	1.26	0.00	98.29	98.29	0.00	0.00	0.04	0.35	0.06	100.00	2750
1990-91	1.24	0.00	98.13	98.13	0.00	0.00	0.04	0.57	0.02	100.00	3116
1992-93	1.15	0.00	98.20	98.20	0.00	0.00	0.03	0.59	0.03	100.00	3614
1997-98	0.87	0.00	86.41	86.41	0.00	0.00	0.02	12.69	0.02	100.00	5773
GROWTH RATE (%)											
1988-93	3.39	0.00	5.24	5.24	0.00	0.00	-1.89	17.14	-9.21	5.26	
1993-98	4.05	0.00	7.41	7.41	0.00	0.00	0.00	103.47	0.00	10.19	
TOTAL DELIVERED ENERGY **											
SHARES (%)											
1987-88	17.36	2.75	45.06	40.10	4.96	9.63	22.21	**	2.99	100.00	
1990-91	18.64	2.74	44.43	39.91	4.52	11.37	20.11	**	2.71	100.00	
1992-93	16.47	2.64	45.46	40.74	4.71	10.16	22.64	**	2.64	100.00	
1997-98	19.05	2.32	47.33	42.16	5.17	8.24	20.73	**	2.32	100.00	
GROWTH RATE (%)											
1988-88	11.05	6.52	5.84	6.51	1.18	12.41	7.28	**	-10.08	6.70	
1988-93	4.76	4.94	6.05	6.20	4.79	7.00	6.28	**	3.24	5.87	
1993-98	10.43	4.60	8.13	8.00	9.25	2.88	5.39	**	4.60	7.26	

* Delivered energy is energy supply less transportation losses, transmission/distribution losses, exports, feedstock and non-energy (lube) products.

** Consumption of oil, gas and coal for the power sector is reflected as electricity in total delivered energy.

Source: Working Group on 8th Plan, analysis by Energy Wing and agencies concerned i.e. WAPDA/KESC/OCAC for power OCAC/PSO/EW for oil, SNGPL/SSGC/EW for gas, M/o Petroleum and Natural Resources /EW for coal and EW for Biomass.

Table-III-6.2

Generation Programme

S.NO	STATION NAME	UNIT NO	INSTALLED CAPACITY	STARTING DATE	DATE OF COMMISSIONING
I	PROJECTS TO BE COMPLETED BY JUNE, 1998				
1	Guddu C.C. (s)	9	145	O/G	JAN. 94
2	Mangla	10	100	O/G	JAN. 94
3	Faisalabad C.C (a)	9	40	O/G	JAN. 94
4	Lakhra F.D	1	50	O/G	JAN. 94
5	Muzaffargarh (s)	2	210	O/G	MARCH 94
6	Muzaffargarh (s)	5	200	O/G	JUL. 94
7	Lakhra F.D	2	50	O/G	JUL. 94
8	Muzaffargarh (s)	3	210	O/G	SEPT. 94
9	Kotri C.C. (s)	7	40	O/G	SEPT. 94
10	Kot Addu C.C. (g)	13	132	O/G	SEPT. 94
11	Kot Addu C.C. (g)	14	132	O/G	OCT. 94
12	Lakhra F.D	3	50	O/G	DEC. 94
13	Muzaffargarh (s)	6	200	O/G	JAN. 95
14	Kot Addu C.C. (s)	15	132	O/G	MAY 95
15	Kot Addu C.C. (s)	11	100	O/G	JUN. 95
16	Kot Addu C.C. (s)	12	100	O/G	JUN. 95
17	Muzaffargarh (s)	4	300	O/G	JUL. 95
18	Bin Qasim Unit 6	1	210	O/G	APR. 96
	TOTAL		2401		
II	PROJECTS TO BE COMPLETED DURING 9TH PLAN PERIOD				
19	Chshma (Hyd)	1-8	184	JAN. 94	SEP. 98
20	Chshma (Nuc)	1	300	FEB. 92	SEP. 99
21	Ghazi Barotha Hyd.	1	285	MAY. 95	DEC. 99
22	Ghazi Barotha Hyd.	2	285	MAY. 95	FEB. 2000
23	Ghazi Barotha Hyd.	3	285	MAY. 95	APR. 2000
24	Ghazi Barotha Hyd.	4	285	MAY. 95	JUN. 2000
25	Ghazi Barotha Hyd.	5	285	MAY. 95	AUG. 2000
26	Neelum Jhelum/Kohala Hyd	1	120	JUNE 94	JUNE 2002
27	Neelum Jhelum/Kohala Hyd	2	120	JUNE 94	SEPT. 2002
28	Neelum Jhelum/Kohala Hyd	3	120	JUNE 94	DEC. 2002
29	Neelum Jhelum/Kohala Hyd	4	120	JUNE 94	MAR. 2003
	TOTAL		2389		

Table-III-6.3

Private Sector Power Projects

S.No	Name of the Project	Capacity (MW)
1	Hub Thermal Power Project	1292
2	Uch Combined Cycle Plant	584
3	120 MW Thermal Plant, Lahore	120
4	Steam Turbine Project at Lasbela, Balochistan	300
5	Steam Turbines at Muzaffargarh	315
6	Steam Turbines at West Wharf Karachi	420
7	Combined Cycle, Kabirwala	147
8	Combined Cycle, Quetta	200
9	New Proposals Expected under recommended policy	1500
TOTAL		4878

Table-III-6.4

Primary Transmission Programme

S.NO	DESCRIPTION	DATE OF COMPLETION	LENGTH (KM)
1	500 KV TARBELA-LAHORE	1993-94	397
2	SECOND 200 KV GUDDI-SIBBI-QUETTA	1994-95	387
3	SECOND 500 KV LAHORE-JAMSHORO	1994-95	1075
4	500 KV TARBELA-PESHAWAR	1995-96	117
5	UPGRADATION OF GHAKKAR GRID STATION TO 500 KV	1995-96	
6	UPGRADATION OF 500 KV REWAT-LAHORE	1995-96	
7	500 KV HUB-JAMSHORO	1995-96	2X200
8	UPGRADATION OF 220 KV MUZAFFARGARH SUBSTATION TO 500 KV	1995-96	
9	THIRD 500 KV JAMSHORO-LAHORE	1996-97	1057
10	4TH 500 KV JAMSHORO-LAHORE	1997-98	1057
11	220 KV KOT ADDU-LORALAI	1997-98	400
12	500 KV PESHAWAR-GHAZI BAROTHA	1998-99	
13	TARBELA-REWAT IN & OUT AT GHAZI BAROTHA	1998-99	
14	500 KV TARBELA-REWAT	1999-2000	

Table – III – 6.5

**Major Energy Sector Targets
(1993 – 1998)**

Sr. No.	Description	Benchmark 1992/93	1997/98
	POWER		
1.	Installed Capacity (MW)	9649	13585
	– Public Sector	–	2700
	– Private	137	137
	– PAEC & Others	9786	16422
	– Total	2992	6636
	– Addition in Capacity		
2.	Maximum Demand (MW)	8611	11173
	– System Demand	2724	2562
	– Addition in Demand	7.9	5.35
	– Growth Rate (%)		
3.	Energy Generated (GWh)	48639	68617
	– Annual Energy	15442	19978
	– Addition in Annual Generation	7.94	7.12
	– Growth rate w.r.t. 1987–88(%)		
4.	System Losses	23	18.5
	– WAPDA	34	19
	– KESC		
5.	Consumers	4.7	6.0
	– Urban	4.6	6.4
	– Rural		
6.	No. of Village/Abadis Electrified	35171	54871
	– Cumulative	17447	19700
	– Addition		
	FUEL		
7.	Oil Demand(Domestic) (000 tons).	12200	18300
8.	Oil Production (000 BPD).	60	123.3
	– Public Sector	26	52.2
	– Private	34	71.1

Table—III—6.5

Sr. No.	Description	Benchmark 1992/93	1997/98
9.	Oil Bill (Mill.\$)	1578	2300
10.	Refinery Capacity (Mill Tons).	6.33	7.94
11.	Storage Capacity (Metric Tons)	70000	110000
12.	No. of Wells Drilling	217	350
	— Exploratory		
	o OGDC	46	70
	o Private	44	72
	— Development		
	o OGDC	77	110
	o Private	50	98
13.	Gas Production(Peak) (MMCFD)	1855	2554
	Gas Production(Average) (MMCFD)	1598	2200
14.	No. of Gas Consumers (Millions)	1.8	3.3
15.	LPG Production (Tons/Day)	303	595
16.	Coal Production (Mill/Tons)	6.46	10.52
	PRIMARY ENERGY		
17.	Demand Growth Rate (%)		
	— Power	8.1	5.3
	— Oil	6.9	7.7
	— Gas	5.9	6.6
	— Coal	2.4	10.3
	— Biomass	3.5	1.6

TARGET

Table-III-6.6

Eighth Plan Investment (Energy Sector)

Summary (1992-93 Prices)

(FEDERAL SUBJECTS)

(Rs. Billion)

Sr. No.	NAME OF AGENCY	PUBLIC SECTOR		TOTAL PUBLIC SECTOR	PRIVATE SECTOR	GRAND TOTAL (Public + Private)
		THROUGH BUDGET	OUTSIDE BUDGET			
	POWER					
	Ministry of Water & Power					
1.1	Rural Electrification Wapda	T 15.905	0.000	15.905	0.000	15.905
		F 3.182	0.000	3.182	0.000	3.182
		L 12.723	0.000	12.723	0.000	12.723
1.2	Private Sector	T 0.000	0.000	0.000	89.554	89.554
		F 0.000	0.000	0.000	77.024	77.024
		L 0.000	0.000	0.000	12.530	12.530
	Prime Minister Secretariat					
2	PAEC	T 18.110	0.000	18.110	0.000	18.110
		F 11.030	0.000	11.030	0.000	11.030
		L 7.080	0.000	7.080	0.000	7.080
	Sub Total Power (Ministry)					
		T 34.015	0.000	34.015	89.554	123.569
		F 14.212	0.000	14.212	77.024	91.236
		L 19.803	0.000	19.803	12.530	32.333
	Corporation (Power)					
3.1	WAPDA (Other than R.E.)	T 0.000	146.245	146.245	0.000	146.245
		F 0.000	80.225	80.225	0.000	80.225
		L 0.000	66.020	66.020	0.000	66.020
3.2	KESC	T 0.000	32.384	32.384	0.000	32.384
		F 0.000	11.714	11.714	0.000	11.714
		L 0.000	20.670	20.670	0.000	20.670
	Sub Total Power (Corporation)					
		T 0.000	178.629	178.629	0.000	178.629
		F 0.000	91.939	91.939	0.000	91.939
		L 0.000	86.690	86.690	0.000	86.690
	Grand Total Power (Ministries + Corporations)					
		T 34.015	178.629	212.644	89.554	302.198
		F 14.212	91.939	106.151	77.024	183.175
		L 19.803	86.690	106.493	12.530	119.023

Table-III-6.6

Eighth Plan Investment (Energy Sector)

Summary (1992-93 Prices)

(FEDERAL SUBJECTS)

(Rs. Billion)

Sr. No.	NAME OF AGENCY		PUBLIC SECTOR		TOTAL PUBLIC SECTOR	PRIVATE SECTOR	GRAND TOTAL (Public + Private)
			THROUGH BUDGET	OUTSIDE BUDGET			
	Fuel						
	4 Ministry of Petroleum and Natural Resources						
4.1	Directorate General of Petroleum Concession (DGPC)	T F L	3.230 2.380 0.850	0.000 0.000 0.000	3.230 2.380 0.850	35.000 24.500 10.500	38.230 26.880 11.350
4.2	GSP/Coal Confirmation	T F L	2.216 0.665 1.551	0.000 0.000 0.000	2.216 0.665 1.551	0.000 0.000 0.000	2.216 0.665 1.551
4.3	HDIP (Renewables (R&D), Solar Power and Training	T F L	1.000 0.740 0.260	0.500 0.260 0.240	1.500 1.000 0.500	0.000 0.000 0.000	1.500 1.000 0.500
4.4	ENERCON (Now M/O W&P)	T F L	1.300 1.100 0.200	0.000 0.000 0.000	1.300 1.100 0.200	0.000 0.000 0.000	1.300 1.100 0.200
	Sub Total Fuel (Ministries)	T F L	7.746 4.885 2.861	0.500 0.260 0.240	8.246 5.145 3.101	35.000 24.500 10.500	43.246 29.645 13.601
	5 Corporations (Fuel)						
5.1	OGDC	T F L	0.000 0.000 0.000	33.687 20.345 13.342	33.687 20.345 13.342	0.000 0.000 0.000	33.687 20.345 13.342
5.2	SNGPL	T F L	0.000 0.000 0.000	8.255 2.958 5.297	8.255 2.958 5.297	15.630 2.320 13.310	23.885 5.278 18.607
5.3	SSGC	T F L	0.000 0.000 0.000	9.650 2.987 6.663	9.650 2.987 6.663	5.224 0.934 4.290	14.874 3.921 10.953

Table-III-6.6

Eighth Plan Investment (Energy Sector)

Summary (1992-93 Prices)

(FEDERAL SUBJECTS)

(Rs. Billion)

Sr. No.	NAME OF AGENCY		PUBLIC SECTOR		TOTAL PUBLIC SECTOR	PRIVATE SECTOR	GRAND TOTAL (Public + Private)
			THROUGH BUDGET	OUTSIDE BUDGET			
5.4	NIOC* (New Refineries etc)	T	2.889	11.000	13.889	24.074	37.963
		F	0.000	0.000	0.000	24.074	24.074
		L	2.889	11.000	13.889	0.000	13.889
5.5	PMDC/Mine Development	T	0.187	2.353	2.540	0.000	2.540
		F	0.000	0.890	0.890	0.000	0.890
		L	0.187	1.463	1.650	0.000	1.650
5.6	Storages (PSO)	T	0.000	0.000	0.000	29.900	29.900
		F	0.000	0.000	0.000	7.790	7.790
		L	0.000	0.000	0.000	22.110	22.110
5.7	Pipelines (PARCO)	T	0.000	12.290	12.290	17.920	30.210
		F	0.000	6.110	6.110	9.990	16.100
		L	0.000	6.180	6.180	7.930	14.110
5.8	Revamp of existing refineries	T	0.000	0.822	0.822	2.173	2.995
		F	0.000	0.458	0.458	1.156	1.614
		L	0.000	0.364	0.364	1.017	1.381
5.9	Import of Gas	T	0.000	0.000	0.000	106.735	106.735
		F	0.000	0.000	0.000	41.578	41.578
		L	0.000	0.000	0.000	65.157	65.157
5.10	PERAC (Hydrocracker)	T	0.000	0.000	0.000	8.857	8.857
		F	0.000	0.000	0.000	6.191	6.191
		L	0.000	0.000	0.000	2.666	2.666
	Total Fuel (Corporation)	T	3.076	78.057	81.133	210.513	291.646
		F	0.000	33.748	33.748	94.033	127.781
		L	3.076	44.309	47.385	116.480	163.865
	Total Fuel (Ministries + Corporation)	T	10.822	78.557	89.379	245.513	334.892
		F	4.885	34.008	38.893	118.533	157.426
		L	5.937	44.549	50.486	126.980	177.466
	Grand Total (Power+Fuel)	T	44.837	257.186	302.023	335.067	637.090
		F	19.097	125.947	145.044	195.557	340.601
		L	25.740	131.239	156.979	139.510	296.489

* Equity 25% out of which GOP = 12.5%. GOP equity distributed as Rs.2.889 from budget and Rs.0.8 billion from outside budget. GOP public sector loan = Rs.10.2 billion

N.B Deflators on local 6.5% annually and on foreign 3.5% annually used for WAPDA, Private Power, SNGPL, NIOC, PSO, PARL, existing Refineries, Hydrocracker and import of gas.
Item 5.9 also includes investment to be made in the country to receive imported gas.

Table-III-7.1

**Allocations by Executing Agencies
Federal Programme
(Transport and Communications)**

(Rs. Million)					
Sr. No.	Ministry/Sub-Sector	Public Sector	Public Sector Corporations		Total
		(PSDP)	Budge- tary	Non Bud- getary	
1	2	3	4	5	6
A. FEDERAL					
1.	Ministry of Railways	40,041	-	-	40,041
2.	Ministry of Communication				
	a) National Highways and	-	74,687	-	74,687
	b) D.G. Ports & Shipping	3,256	-	-	3,256
	c) K.P.T.	-	-	1,500	1,500
	d) SCO i/c Others	1,144	-	-	1,144
	Communications				
	e) Research and Highway	200	-	-	200
	Safety.				
	f) P.P.S.C.	-	-	2,900	2,900
	Sub-Total (2)	4,600	74,687	4,400	83,687
3.	Ministry of Defence (Aviation Division)				
	a) Civil Aviation	-	-	4,406	4,406
	Authority				
	b) Airport Security Force	607	-	-	607
	c) Air Lines	-	-	1,300	1,300
	c) Pakistan Met. Deptt.	485	-	-	485
	Sub-Total (3)	1,092	-	5,706	6,798
4.	Planning & Development Division.				
	- National Institute	50	-	-	50
	of Transport.				
	Total (T & C)	45,783	74,687	10,106	130,576
5.	Pakistan Telecommunication - Corporation (Outside Budget)		-	18,300	-

Table-III-7.2

**Major Physical Targets
(Transport and Communications)**

Sub-Sector	Unit	Benchmark 1992-93	Target 1997-98
A. TRAFFIC			
1. RAILWAYS			
a) Passenger	(M. P. Kms)	20,771	22,932
b) Freight	(M. T. Kms)	6,400	9,850
II. ROAD			
a) Passenger	(M. P. Kms)	135,000	1,54,481
b) Freight	(M. T. Kms)	37,000	40,390
III. AIR			
DOMESTIC			
a) Passenger	(MRP. Kms)	2,737	4,006
b) Freight	(MRFT. Kms)	42	53
INTERNATIONAL			
a) Passenger	(MRP. Kms)	7,739	9,740
b) Freight	(MRFT. Kms)	449	522
Total			
a) Passenger	(MRP. Kms)	10,476	13,747
Freight (MRFT. Kms)		491	575
IV. PORT			
a) Dry Cargo	(Million Tonnes)	11.1	13.000
b) Liquid Cargo	"	11.5	14.400
V. TELEGRAPH & TELEPHONE:			
a) Trunk Traffic	(Million calls)	388	747
b) Telex Traffic	"	49.5	29.2
c) Inland Telegram	(Message in million)	1.44	0.677
d) Overseas Telegrams	(Message in million)	0.13	0.025

Sub-Sector	Unit	Benchmark 1992-93	Target 1997-98
B. PHYSICAL TARGETS:			
I. RAILWAYS:			
a) Manufacture of D.E.Locos.	(Nos)	-	51
b) Rehabilitation of Locomotives	(Nos)	-	101
c) Manufacture of Passenger Carriages	(Nos)	-	158
d) Conversion of existing coaches to A.C.Coaches.	(Nos)	-	56
e) Refurbishing of Passenger Coaches.	(Nos)	-	90
f) Track Rehabilitation	Kms		
i) Rail Renewal	"	-	3,600
ii) Sleeper Renewal	"	-	3,000
g) Doubling of Track	"	-	800
h) High Capacity Wagons		-	
II. NATIONAL HIGHWAYS			
a) Total Kilometerage	Kms	6621	6956
b) Rehabilitation/Improvement	"	-	4659
c) New Construction	"	-	335
IV. AVIATION			
A. INFRASTRUCTRE			
i) Improvement of runways, Taxiways and Aprons.			
ii) International and Haj Terminal at Islamabad.			
iii) Upgradation of Multan Airport for Airbus Operation.			
iv) New Air Terminal Building at Lahore.			
v) New International Airport at Peshawar and Islamabad under the private sector.			
vi) Basic aerodrome facilities at Rahimyar Khan. Sehwan Sharif and Mansehra.			
vii) Procurement of crash fire and rescue vehicles.			
B. AIRCRAFT			
i) Replacement of Boeing 747 aircraft with 7 New Wide Bodied aircraft.			
ii) Replacement of Fokker F-27 aircraft with 15 new TurboProp aircraft.			
iii) Purchase of equivalent capacity of two Airbus A310-300 and three Boeing 737-300 aircraft.			

Table-III-7.3

Telecommunication Targets

	Unit	Benchmark 1992-93	Target 1997-98
Telegraph and Telephone			
a) Trunk Traffic	Million calls	388	747.06
b) Telex Traffic	Million Calls.	49.45	49.45
c) Inland Telegram	(Message in million)	1.44	0.677
d) Overseas Telegram	(Message in million)	0.13	0.025

Telegraph & Telephone (PTC including SCO) June, 1998	Unit	Benchmark	Target 1992-93	Position on 1993-98
1. Telephone	(Nos)	2,000,000	2,500,000	4,500,000
2. Telephone Density	(per 1000 population)	20.6	-	35.6
3. Telephone Exchange	(Nos)	16,00	1400	3,000
4. NWD Terminals	"	400	600	1000
5. P.C.Os	"	6,861	20,000	26,861
6. Trunk position	"	1400	1100	2,500
7. Telex Line Units	"	14,000	1,000	15,000
8. STD/NWD/Channel	"	60,000	60,000	120,000
9. VFT Channel	"	7,000	3,000	10,000
10. Computerized Directory	"	5	3	8

Table-III-8.1

Programmes and Targets (PP&H)

S.No	Major Programme	Physical Targets
1.	Plot Development	
	- Urban Areas the (3 Marla to 1 Kanal)	Development of 1.217 million plots to meet needs of incremental population.
	- Rural Areas (7 Marla)	Development of 500,000 plots to partially meet the need of rural poor.
2.	Water Supply and Sanitation	
	- Urban Water Supply	To increase population coverage from 85 percent in 1993 to 95 percent by 1997-98 by covering an additional population of 11.884 million.
	- Urban Sewerage/Drainage	To increase population coverage from 60 percent in 1993 to 80 percent by 1997-98 by covering an additional population of 14.382 million.
	- Rural Water Supply (Social Action Programme)	Increase population coverage from 47.14 in 1993 to 70.51 percent by 1997-98 covering an additional population of 27.41 million.
	- Rural Sanitation (Social Action Programme)	Increase population coverage from 13.54% in 1993 to 31.51 percent by 1997-98 by covering an additional population of 18.81 million.
3.	Government Servants Housing	Construction of 20,000 Nos. houses for Federal and Provincial Governments Employees in Islamabad and Provincial Capitals.
4.	Government Offices/Buildings	Construction of add. 3.00 million sq.ft. office-space in Islamabad and Provincial Capitals.
5.	Katchi Abadis/Slums (Regularization & Improvement)	Regularization and improvement of environment condition of 1.77 million population residing in Katchi Abadis/ slums

Table-III-8.2
List of 8th Plan Projects and Proposed Allocations
(PP&H)

(Million Rs.)

PROJECTS	TOTAL COST	EXPENDITURE INCURRED UPTO END OF 7th PLAN i.e. UPTO 1992-93	8th PLAN ALLOCATION	BEYOND 8th PLAN
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Federal**A. Capital Development Authority**

1. Cabinet/Establishment Block, Islamabad	368	335	33	-
2. Supreme Court Building, Islamabad	378	186	192	-
3. Construction of Govt. Servants Housing on Abandoned Plots	79	29	50	-
4. CBR House, Islamabad	78	10	68	-
5. Provision of individual Gas Meters in Govt. Houses.	43	25	18	-
6. Bulk Water Supply, Phase-II from Simly Dam and Distribution system.	970	920	50	-
7. Sewerage Treatment Plant, Phase-II	457	20	437	-
8. Rehabilitation of Water Treatment Plant System.	264	10	254	-
9. Construction of Convention Centre in P.M.'s Estate Complex.	58	-	58	-
10. Construction of accommodation for Police P.M.'s Colony.	60	-	60	-
11. Construction of Parliamentary Lodges, Islamabad	748	150	598	-
12. Improvement of Water Supply System in Islamabad.	60	-	60	-
13. Water Supply to Islamabad/Rawalpindi from Khanpur Dam source (Islamabad portion).	1100	60	500	540
14. 3rd Conduction Main from Simly to Islamabad for Water Supply.	742	-	500	242

Table-III-8.2

**List of 8th Plan Projects and Proposed Allocations
(PP&H)**

(Million Rs.)

Projects	Total Cost	Expenditure Incurred upto End of 7th Plan i.e. upto 1992-93	8th Plan Allocation	Beyond 8th Plan
15. Construction of Prime Minister's Secretariat Building, Islamabad	253	-	253	-
16. Minor-on-going & New schemes (Block)	587	218	369	-
Total:-	6245	1963	3500	782

B. Government Servants Housing

1. Construction of 5160 houses for F.G Employees at Islamabad, (Phase-I-1170 units).	380	323	57	-
2. Construction of 5160 houses for F.G Employees at Islamabad, Phase-II (992 houses).	276	30	246	-
3. Const.of houses for F.G. Employees at Karachi, Lahore, Peshawar, and Quetta.	350	215	135	-
4. Const.of houses for P.M. staff at Islamabad.	122	22	100	-
5. Const.of 250 houses for F.g. Employees at Quetta	192	100	92	-
6. Const.of Federal Ministers Residences at Islamabad.	150	75	75	-
7. Const.of Govt. owned residences on abandoned plots	70	20	50	-
8. Const.of Govt. Servants Housing at Dhanasinghwala, Lahore, (Phase-II)	90	-	90	-
9. Const.of F.G. Employees housing in Islamabad (Phase-III,1000 units)	1000	-	1000	-
10. Minor ongoing & new schemes of housing including CBR. (Block)	1155	500	655	-
Total Govt. Servants Housing	3785	1285	2500	-

C. Govt. Offices/Buildings

1. Const. of FPSC office building Islamabad	42	15	27	-
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Table-III-8.2

**List of 8th Plan Projects and Proposed Allocations
(PP&H)**

PROJECTS	TOTAL COST	EXPENDITURE INCURRED UPTO END OF 7th PLAN i.e. upto 1992-93	(Million Rs.)	
			8th PLAN ALLOCATION	Beyond 8th PLAN

2. Const. of Federal Shariat Court Building Islamabad.	80	2	78	-
3. Const. of Office Building for Election Commission of Pakistan, Islamabad.	32	2	30	-
4. Const. of Wafaqi Mohtasib's Sectt. Building Islamabad.	32	2	30	-
5. Const. of Office Building for Statistic Division at Islamabad.	57	0	57	-
6. Minor ongoing and new schemes inculding CBR.	208	130	78	-
Total Govt. Offices/Buildings:	451	151	300	-

D. Islamabad Administration

On-going & New (Block)	325	170	155	-
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E. Civil Armed Forces

1. Accommodation for HQ, FC at Quetta.	170	100	70	-
2. Const. of Permanent Acc. for CAF at various places in Balochistan.	225	200	25	-
3. Const. of Ranger's Border out-post.	169	99	70	-
4. Minor on-going and new schemes of Frontier Corps Balochistan, NWFP, Pakistan Rangers, Coast Guards, FIA etc.	676	641	35	-

Total (CAF):	1240	1040	200	-
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F. Ongoing and new schemes of Constabularies, Levy/thanas under States and Frontier Regions Division.	225	125	100	-
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Table-III-8.2

**List of 8th Plan Projects and Proposed Allocations
(PP&H)**

(Million Rs.)

Projects	Total Cost	EXPENDITURE INCURRED UPTO END OF 7th PLAN i.e. upto 1992-93	8th PLAN Allocation	BEYOND 8th PLAN
G. Special Areas				
(i) Block allocation for on-going and new schemes relating to Housing, Govt. Offices/ Buildings and Water Supply/Sanitation in AJ&K.	1545	500	726	-
(ii) Block allocation for on-going and new schemes relating to Housing, Govt. offices/ Buildings and Water Supply/Sanitation in Northan Areas.	525	100	261	-
(iii) Block allocation for on-going and new schemes relating to Housing, Govt. offices/ Buildings and Water Supply/Sanitation in FATA:	1690	500	908	-
(iv) Miscellaneous (Research Institutions etc).	280	80	50	-
Total (Federal):	16311	5914	8700	782

Table-III-8.3

**Physical Planning and Housing Sector
(Eighth Plan)
Financial Outlay**

(Million Rupees)

S.No.	Sub-Sector	Federal	Provincial	Total
1.	Water Supply/Sanitation	-	<u>19.255</u>	<u>19.255</u>
	-Urban Water Supply	-	8.805	8.805
	-Urban Sewerage/Drainage	-	10.450	10.450
2.	Government Servants Housing	2.500	2.500	5.000
3.	Govt. Office/Buildings	300	760	1,060
4.	Islamabad City/CDA	3,500	-	3,500
5.	Islamabad Administration	155	-	155
6.	Civil Armed Forces	300	-	300
	-Under Interior Division	200	-	200
	-Under S&FR Division	100	-	100
7.	Housing	-	500	500
	-7&3 Marla Plots in Rural and Urban Areas			
8.	Miscellaneous Research and Institutions	50	300	350
Total PSDP		6,805	23,315	30,120
<u>Social Action Programme (SAP)</u>				
1.	Rural Water Supply/Sanitation in Provinces.	-	29,100	29,100
2.	Rural Water Supply Sanitation AJ & K, Northern Areas, FATA and ICT.	2,333	-	2,333
Total:		2,333	29,100	31,433
Total PP&H Sector:		9,138	52,415	61,553

Table-III-9.1
Summary of Eighth Plan Allocation for
Various Sub-Sector of Education

(Million Rs)

Sub-Sector	Allocation	SEVENTH PLAN		Eighth Plan Allocation	SAP Component
		Expenditure incurred including F.Aid	Utilization		
Primary Education	10128.0	11765.7	116	32669.0	32669.0
Secondary Education	6539.0	6007.2	92	16521.2	-
Teacher Education	287.0	291.0	101	3360.0	2340.0
Technical Education	2000.0	920.0	46	2447.0	
College Education	615.0	1892.2	308	2507.5	
Scholarship	760.0	926.1	122	1400.0	
University Education	2000.0	1480.5	74	4100.0	
Literacy & Mass Education	300.0	722.1	241	1750.0	1750.0
Library Services & Museums	181.0	19.8	11	200.0	
Production & Supply of Text Books		7.1			
Miscellaneous	150.0	647.7	432	677.0	
Education Foundation	-	525.0		3200.0	2560.0
Other Division:					
Establishment Division	150.0	41.9	28	200.0	-
TOTAL:	23110.0	25246.5	109	69031.7	39319.0

Table-III-9.2
Proposed Eighth Plan Allocation for
Federal Agencies

(Education & Training)

	<i>(Million Rs)</i>		
	Non-SAP	SAP	Total
Ministry of Education	5200.0	276.0	5476.0
Ministry of Defence	750.0	100.0	850.0
Islamabad Capital Territory	1000.0	208.0	1208.0
Total:	6950.0	584.0	7534.0

Table-III-9.3

Development Allocations For SAP/8th Plan 1993-98

	1992-93 (B-Mark)	1993-94	1994-95	1995-96	1996-97	1997-98	Total 8th Plan
PUNJAB							
BASIC EDUCATION	2.431	2.420	2.820	3.620	4.500	5.280	18.640
Primary Education	2.172	2.210	2.420	2.830	3.430	3.800	14.690
Teacher Education	0.009	0.050	0.120	0.300	0.300	0.400	1.170
Adult Literacy	0.000	0.030	0.080	0.140	0.220	0.340	0.810
Education Foundation	0.250	0.130	0.200	0.350	0.550	0.740	1.970
SINDH							
BASIC EDUCATION	1.700	1.400	1.550	1.850	2.070	2.190	9.060
Primary Education	1.673	1.300	1.400	1.600	1.700	1.740	7.740
Teacher Education	0.017	0.050	0.070	0.110	0.160	0.200	0.590
Adult Literacy	0.000	0.040	0.060	0.100	0.150	0.180	0.530
Education Foundation	0.010	0.010	0.020	0.040	0.060	0.070	0.200
N.W.F.P							
BASIC EDUCATION	1.080	1.121	1.183	1.358	1.533	1.695	6.890
Primary Education	1.066	1.070	1.100	1.250	1.400	1.530	6.350
Teacher Education	0.014	0.020	0.040	0.050	0.060	0.070	0.240
Adult Literacy	0.000	0.001	0.003	0.008	0.013	0.015	0.040
Education Foundation	0.000	0.030	0.040	0.050	0.060	0.080	0.260
BALUCHISTAN							
BASIC EDUCATION	0.172	0.216	0.282	0.360	0.438	0.684	1.980
Primary Education	0.163	0.200	0.250	0.300	0.350	0.590	1.690
Teacher Education	0.009	0.010	0.020	0.040	0.060	0.060	0.190
Adult Literacy	0.000	0.002	0.004	0.006	0.008	0.010	0.030
Education Foundation	0.000	0.004	0.008	0.014	0.020	0.024	0.070
TOTAL PROVINCIAL							
BASIC EDUCATION	5.383	5.157	5.835	7.188	8.541	9.849	36.570
Primary Education	5.074	4.780	5.170	5.980	6.880	7.660	30.470
Teacher Education	0.049	0.130	0.250	0.500	0.580	0.730	2.190
Adult Literacy	0.000	0.073	0.147	0.254	0.391	0.545	1.410
Education Foundation	0.260	0.174	0.268	0.454	0.690	0.914	2.500
A.J & K							
BASIC EDUCATION	0.062	0.103	0.150	0.160	0.176	0.186	0.775
Primary Education	0.056	0.076	0.113	0.134	0.143	0.155	0.620
Teacher Education	0.006	0.018	0.026	0.012	0.009	0.000	0.065
Adult Literacy	0.000	0.009	0.011	0.014	0.024	0.031	0.090

Table-III-9.3
Development Allocations For SAP/8th Plan 1993-98

	1992-93 (B-Mark)	1993-94	1994-95	1995-96	1996-97	1997-98	Total 8th Plan
FATA							
BASIC EDUCATION	0.065	0.111	0.149	0.177	0.234	0.286	0.958
Primary Education	0.063	0.099	0.134	0.157	0.204	0.248	0.843
Teacher Education	0.002	0.003	0.004	0.005	0.006	0.007	0.025
Adult Literacy	0.000	0.009	0.011	0.014	0.024	0.031	0.090
N-AREA							
BASIC EDUCATION	0.008	0.037	0.056	0.081	0.118	0.140	0.432
Primary Education	0.008	0.028	0.045	0.067	0.101	0.120	0.362
Teacher Education	0.000	0.006	0.007	0.008	0.009	0.010	0.040
Adult Literacy	0.000	0.003	0.004	0.006	0.008	0.010	0.030
ISLAMABAD (ICT)							
BASIC EDUCATION	0.018	0.024	0.032	0.041	0.052	0.060	0.208
Primary Education	0.018	0.021	0.028	0.035	0.044	0.050	0.178
Teacher Education	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Adult Literacy	0.000	0.003	0.004	0.006	0.008	0.010	0.030
Education Foundation	0.000	0.000	0.000	0.000	0.000	0.000	0.000
M/O EDUCATION							
BASIC EDUCATION	0.021	0.039	0.045	0.059	0.062	0.070	0.276
Primary Education	0.014	0.016	0.018	0.019	0.021	0.022	0.096
Teacher Education	0.005	0.003	0.004	0.004	0.005	0.005	0.020
Adult Literacy	0.002	0.016	0.016	0.024	0.021	0.023	0.100
Education Foundation	0.000	0.004	0.008	0.012	0.016	0.020	0.060
M/O DEFENCE							
BASIC EDUCATION	0.000	0.013	0.015	0.019	0.024	0.029	0.100
Primary Education	0.000	0.013	0.015	0.019	0.024	0.029	0.100
TOTAL FEDERAL							
BASIC EDUCATION	0.174	0.327	0.447	0.537	0.666	0.772	2.749
Primary Education	0.159	0.253	0.352	0.432	0.537	0.625	2.199
Teacher Education	0.013	0.030	0.041	0.029	0.029	0.022	0.150
Adult Literacy	0.002	0.041	0.046	0.064	0.085	0.105	0.340
Education Foundation	0.000	0.004	0.008	0.012	0.016	0.020	0.060
NATIONAL							
BASIC EDUCATION	5.556	5.484	6.282	7.725	9.207	10.621	39.319
Primary Education	5.233	5.033	5.522	6.412	7.417	8.285	32.669
Teacher Education	0.061	0.160	0.291	0.529	0.609	0.752	2.340
Adult Literacy	0.002	0.114	0.193	0.318	0.476	0.650	1.750
Education Foundation	0.260	0.178	0.276	0.466	0.706	0.934	2.560

Table-III-9.4
Achievements During Seventh
Plan and Targets for Eight Plan

	1992-93			1997-98		
	Total	Govt:	Private Established	Total	Govt:	Private Established
1. Mosque schools at the end of Plan Period	38655	38655		25955	*25955	
2. Primary schools at the end of Plan Period						
Total	103573	93493	10080	133573	117493	16080
Male	54580	49500	5080	67080	60000	7080
Female	48993	43993	5000	66493	57493	9000
3. During the Plan Period		<u>7th plan</u>			<u>8th plan</u>	
i) Mosque School Opened		13262			4300	
ii) Primary School Opened		20942			30000**	
iii) Reconstruction of buildings of existing primary schools.		16562			21580	
iv) Conversion of Mosque Schools as Primary Schools		-			17000	
v) Addition of classrooms in over-crowded Primary schools		12888			29486	
vi) Consolidation & improvement of Primary Schools		6201			40360	
4. Total enrolment in class (I-V) by the end of the Plan Period						
Total	12414	10914	1500	17962	15779	2183
Male	7792	6992	800	9944	8802	1142
Female	4622	3922	700	8018	6977	1041
5. Participation Rate (%)						
Total	68.9			87.7		
Male	84.8			95.5		
Female	53.7			81.6		
6. During the Plan Period Upgradation of:						
Primary Schools	4201	3416	785	10500	7800	2700
Middle Schools	2620	2620		5000	4500	500
7. During the Plan Period establishment of new High Schools	793	199	594	800	100	700
8. At the end of Plan period No. of:						
Middle Schools						
Total	11595	9570	2025	17095	12870	4225
Male	7310	6310	1000	9400	6800	2600
Female	4285	3260	1025	7695	6070	1625
High Schools						
Total	10500	9240	1260	15500	13740	1760
Male	6739	6079	660	9089	8279	810
Female	3761	3161	600	6411	5461	950
9. During the Plan period addition of class-rooms in:						
Middle & High		1925		8800	8800	

Table-III-9.4
Achievements During Seventh
Plan and Targets for Eight Plan

	1992-93			1997-98		
	TOTAL	GOVT:	PRIVATE Established	TOTAL	GOVT:	PRIVATE Established
10. Upgradation of High Schools to Model Schools at Distt: Headquarters	40	40				
11. Enrolment at the end of Plan Period (000)						
Middle Stage						
Total	3680	3330	350	5338	4538	800
Male	2483	2303	180	3462	3042	420
Female	1197	1027	170	1876	1496	380
High Stage						
Total	1430	1270	160	2177	1877	300
Male	980	885	95	1444	1284	160
Female	450	385	65	733	593	140
Secondary Stage(VI-X)						
Total	5110	4600	510	7515	6415	1100
Male	3463	3188	275	4906	4326	580
Female	1647	1412	235	2609	2089	520
12. Participation Rate (%)						
Middle Stage						
Total	44.3			48.8		
Male	57.5			62.1		
Female	30.0			35.0		
High Stage						
Total	28.1			32.5		
Male	37.0			42.2		
Female	18.4			22.3		
Secondary Stage(VI-X)						
Total	38.1			42.7		
Male	49.7			54.5		
Female	25.6			30.2		
13. Addition of classes XI-XII in Secondary Schools	368			200		
14. No. of Polytechnics/Monotechnics at the end of Plan						
Total	60	58	2	90	83	7
Male	47	46	1	68	63	5
Female	13	12	1	22	20	2
15. Intake capacity of Polytechnics at the end of Plan	12000			20000	18000	2000

*During 8th Plan establishment of 4300 Mosque Schools are proposed while 1700 existing Mosque Schools are proposed to be converted as Primary Schools.
 **Includes over 6000 private schools.

Table-III-9.5

**Major Physical Targets of SAP Related Programmes
(8th Plan)**

	PUNJAB	SINDH	N.W.F.P	BALUCHISTAN	FEDERAL	PAKISTAN
A. PRIMARY EDUCATION						
1. Establishment of new Primary Schools	5300	7000	8000	1800	1424	23524
2. Establishment of Mosque Schools	-	3000	450	850	-	4300
3. Construction of building of existing shelterless Primary Schools	14800	3000	1000	1200	1580	21580
4. Conversion of Mosque Schools as Primary Schools	8500	4000	4000	500	-	17000
5. Addition of Classrooms in existing overcrowded Primary Schools	16200	2000	7000	2300	1986	29486
6. Consolidation of existing Primary Schools	20000	7000	7800	2800	2760	40360
7. Enrolment at Primary level (in 000)						
Bench Mark 1992-93						
Total:-	7017	2641	1529	499	728	12414
Male:-	4101	1786	1070	378	457	7792
Female:-	2916	855	459	121	271	4622
Target 1997-98						
Total:-	9662	3894	2559	820	1027	17962
Male:-	5070	2330	1435	511	598	9944
Female:-	4592	1564	1124	309	429	8018
8. Participation Rate(%)						
Bench Mark 1992-93						
Total:-	77.5	64.1	58.8	47.7		68.9
Male:-	88.0	86.2	80.7	71.6		84.8
Female:-	66.3	41.8	36.0	23.3		53.7
Target 1997-98						
Total:-	94.4	83.0	86.2	68.6		87.7
Male:-	96.8	99.1	94.8	84.9		95.5
Female:-	91.8	66.9	77.3	52.0		81.6
B. TEACHER EDUCATION						
1. Establishment of Primary Teachers Training Institutes	18	8	8	2	4	40
2. Improvement of existing Teachers Training Institutes	12	25	12	6	10	65

Table-III-10.1

Health Facilities and Manpower

A. <u>Health Facilities</u>		<u>Facility per population</u>	
Hospital beds	76,760	1:1,600	
Rural Health Centres.	604	1: ¹ 2,03,109	(1:142,176)
	Rural Pop		
Basic Health Units.	5,203	1: 23,578 (1:16,505)	
	Rural Pop.		
<u>Manpower</u>		<u>Population</u>	
Doctors	52,596	1	: 2,330
Dentists	2,475	1	: 49,600
Nurses	21,068	1	: 5,823
Paramedics	92,389	1	: 1,328
TBAs	75,265	1	: 1,630

¹ Rural population assumed as 70 percent of the total population.

Table-III-10.2

Health Manpower-Projected Requirements*

CADRE	ANNUAL DEMAND	NO. INST	TR/ INST	GRAD NOW	DIFF 2000/1900	%age Change
PROFESSIONAL CADES:						
Med Spec	820	5	164	62	758	1223
Med Off	770	17	45	3587	-2817	-79
Dentist	117	5	23	200	-83	-42
Nurse	2032	41	50	1113	919	83
Pharmacist	237	5	47	180	57	32
PARAMEDICAL CADRES:						
Med Tech.	222	17	13	196	26	13
X-Ray Tech	236	22	11	109	127	117
OT Tech	102	2	51	45	57	127
Lab. Tech	542	17	32	124	418	337
Pharm Tech	488	82	6	2250	-1762	-78
Dent Tech	183	1	183	40	143	358
Vaccinator	80	15	5	75	5	7
Other Tech	179	37?	5	150	29	19
LHV	320	11	29	334	-14	-4
Midwives	439	37	12	785	-346	-44

The "ANNUAL DEMAND" column represents the projected graduate demand in the year 2000. "NO INST" is the number of training institutions which in all cases is the total which currently exist. "TR./INST" column is the first column divided by the second to give the graduates per institution in 2000 given no changes in the institution numbers. The "GRAD NOW" Column represents the number of current graduate. The "DIFF 2000/1990" column is the 2000 graduate demand subtracted from the current graduates now to produce an indication of incremental change over the ten years. The last column "% CHANGE" is the difference column divided by the current graduates times 100 to produce an indication of the proportional change over this projected decade.

*Health Manpower Training Plan project ADB 1990.

Table-III-10.3

Eighth Plan Physical Targets

Sub-sector	Eighth Plan Targets
1.Immunization(Million Children)	22.08
2.ORS(Million Packets)	92.5
3.Training of TBAs	57,744
4.CHWs	37,811
5.New BHUs	252
6.New RHCs	45
7.Strengthening/Improvement of BHUs	3,874
8.Strengthening/Improvement of RHCs Civil Hospitals	492
9.Mohallah(Urban)Health Centres	616
10.Dispensaries(New)	494
11.Mobile Dispensaries	40
12.Hospital beds	21500
13.Doctors	17300
14.Dentist	925
15.Nurses	18000
16.Paramedics	48500

Table-III-10.4

**Agency-Wise Allocation For SAP During
8th Five Year Plan(1993-98)**

						(Billion Rs)
Agency	1993-94	1994-95	1995-96	1996-97	1997-98	Total 8th Plan Allocation
A. Federal						
Health Division	0.279	0.323	0.330	0.361	0.380	1.673
AJK	0.067	0.078	0.087	0.097	0.106	0.435
Norther Areas	0.015	0.018	0.045	0.049	0.065	0.192
FATA	0.063	0.070	0.081	0.087	0.096	0.397
ICT	0.006	0.008	0.009	0.010	0.012	0.045
Total:	0.430	0.497	0.552	0.604	0.659	2.742
B. Provincial*						
	2.133	2.671	2.925	3.374	4.555	15.658
Grand Total (A&B):	2.563	3.168	3.477	3.978	5.214	18.400

(Million Rs.)

*Punjab	9.560
Sindh	2.690
NWFP	0.950
Balochistan	2.458
Total:	15.658

Table-III-10.5

**Eighth Plan Non-SAP Allocation for
Health Sector (Health Division)**

		(Rs. Million)
S.No.	Agency	Allocation
1.	Ayub Medical College	223
2.	Bolan Medical College	650
3.	Health Service Academy	49
4.	Sheikh Zaid Hospital	106
5.	Karachi Medical & Dental College	120
6.	Trauma Centre, Karachi	70
7.	MCH Centre PIMS, Islamabad	500
8.	PIMS/Improvement	100
9.	Kidney Centre, PIMS	136
10.	Institute of Neuro Sciences, PIMS	332
11.	F.G.S.H.	125
12.	Sheikh Zaid Hospital Lahore (Improvement)	100
13.	NICVD/NICH	100
14.	JPMC Master Plan	100
15.	N.I.H. Islamabad	150
16.	Other Programmes	337
Total:		3,198

Table-III-10.6

Health Indices

INDEX		1993	1998
1.	Infant Mortality Rate	86	65
2.	Maternal Mortality Rate	3.0	1.5
3.	Life expectancy ²		
	Male	61.6	63.6
	Female	61.2	63.3
4.	Percentage of children below 1 year fully immunized	80	90
5.	Percentage of expectant mothers fully immunized against tetanus:	80	90
6.	Trained personnel attending pregnancy and child birth (percentage)	80	90
7.	Percentage of low birth weight babies	20	13
8.	Oral rehydration therapy use (percentage)	85	95
9.	Hospital beds	1600	1446
10.	Doctors	2330	1947
11.	Dental Surgeons	49600	41095
12.	Nurses	6622	3833
13.	Paramedics	1711	1165
14.	TBAs	1640	1276
15.	Community Health Workers (Female)	-	One per village

S.No.9 to 14 are facility/population ratios.

² NIPS

Table-III-10.7

Nutritional Targets for 8th Five Year Plan

YEAR(JUNE)

	1990	1993	1995	1998	2000
<u>INDICATOR</u>					
1. Low Birth Weight Babies%	25	25	20	15	13
2. Weight for age (5 years) (moderate to severe malnutrition)%	39	38	29	20	15
3. Average daily per capita calorie supply as % of requirements	100.6	102	103	104	107
4. % of household income spent on food	:				
All Foods:	54	55	53	50	50
Cereals:	17	17	18	19	20
5A. Goitre Prevalence(%) Average	3	2	1.7	1.5	1.5
5B. Endemic Areas	55	45	30	20	10
<u>Vitamin-A Deficiency:</u>					
6. Xerophthalmia(%)	1	1	0.8	0.6	0.5
<u>Iron Deficiency Anaemia (HB. level)(%)</u>					
7. Pregnant and lactating women (15-45 years)	45	40	30	20	15
8. Children	65	60	45	30	20
<u>Mass Awareness</u>					
9. Percentage of mothers:					
A. breastfeeding 0-4 months					
a. Breastfeeding with complementary feeding	89	92	93	95	98
b. Exclusive Breastfeeding	22	27	36	50	70
4-12 month	80	82	83	85	90
12-24 month	50	52	53	55	60
B. Introducing weaning foods 4-6 months	29	32	45	60	75
<u>Infant Weaning Practices</u>					
10. Mean age of introduction of weaning food (%)	9	8	7	6	5
<u>Maternal Nutritional Status</u>					
11. Under-weight mothers(%)	34	34	30	25	15

Table-III-10.8

Nutrition Programmes for the SAP - Federal

	1992-93 Benchmark		1993-98 Targets	
	Physical	Financial (Million Rs)	Physical	Financial (Million Rs)
A. Federal Ministries	-	4	-	3590
1. <u>Nutrition in Primary Health Care System</u>				
i) Establishment of Nutrition Clinics at RHCs/BHUs. (facilities)	:	1	5000	100
ii) Nutrition Surveillance System through Growth Monitoring and Promotion (facilities)	-			
iii) Food Demonstration for Improved Feeding of Children/Mothers(Facilities)	:			
2. Girls School Feeding Programme for Girls Students(Feeding Twice a Week). (Million Population)	-	-	2.87	1550
3. <u>Nutrition Intervention Programme for Combating Diseases of Nutrition Origin:</u>				
i) Iodine Deficiency Diseases (Million Population)				
ii) Iron Deficiency Anaemia (Million Population)	2.5	3	90	1800
iii) Vitamin-A Disease (Million Population)				
4. Support to NGOs Programme and Municipal Corporation (Local bodies) at Big Cities (Million Rupees)	-	-	-	140
B. Federal Areas (NAs,AJK,FATA,ICT)	-	1	-	70
C. Provincial	-	-	-	200
Total:-	-	5	-	3860

Table-III-11.1
Physical Targets 1993-98

(Commulative Number)

NAME OF SERVICE OUTLET	1992-93 (BENCH Mark)	1993-94	1994-95	1995-96	1996-97	1997-98
1	2	3	4	5	6	7

A. PROGRAMME OUTLETS:

i) Family Welfare Centres	1290	1290	1340	1420	1500	1500
ii) Reproductive Health Service 'A' Centres	79	79	80	91	101	101
iii) Mobile Service Units	130	130	185	251	251	251
Sub-Total:	1499	1499	1605	1762	1852	1852

B. LINE DEPARTMENT OUTLETS:

i) Health Departments	2824	5440	6023	6324	6649	6649
ii) Other Line Departments	160	168	195	226	262	300
iii) Target Group Institutions	174	229	284	339	394	450
iv) Traditional Birth Attendants	5000	7000	7000	7000	7000	7000
v) Registered Medical Practitioners	2500	6500	11100	15950	22500	22500
vi) Hakeems	2500	5150	7400	10050	12750	14800
vii) Homoeopaths	1500	2250	3020	3780	4550	4900
Sub-Total:	14658	26737	35022	43669	54105	56599

C. NON-GOVERNMENT ORGANIZATIONS:

580	418	512	582	653	723
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D. COMMUNITY BASED SERVICES:

i) Family Planning Workers	1561	3000	5000	10000	12000	12000
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**E. SOCIAL MARKETING OF CONTRACEPTIVES
(SALE POINTS)**

67000	67000	70000	70000	75000	80000
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**F. SPECIAL AREAS PROGRAMME
(AJK, NA & FATA)**

i) Family Welfare Centres	6	10	14	22	22	22
ii) Reproductive Health Service	-	-	2	4	4	4
iii) Health Outlets	-	214	321	401	478	526
iv) Traditional Birth Attendants	-	30	70	100	130	160
v) Hakeems	-	150	200	200	200	200
vi) Homoeopaths	-	20	40	50	80	100
vii) Village breed F.P Workers	-	-	23	47	47	47

TABLE-III-11.2
FINANCIAL ESTIMATES FOR THE
EIGHTH FIVE YEAR PLAN 1993-98

S.No.	DESCRIPTION	(Million Rs.) COST
FEDERAL		
1.	Administrative Organization	284.100
2.	Population Welfare Services Islamabad District	59.700
3.	Non-Governmental Organizations	300.000
4.	Target Group Institutions	8.800
5.	MCH Population Welfare Services in AJK	22.100
6.	MCH Population Welfare Services in Northern Areas	12.400
7.	Communication Strategy	380.000
8.	Clinical Training through RTIs	200.000
9.	Non-Clinical Training through RWTIs	100.300
10.	NRIFC	49.800
11.	NRIRP	1.300
12.	NIPS	108.000
13.	Population Study Centres	0.750
14.	Monitoring and Research Studies	8.000
15.	Contraceptive Requirement & Distribution	1418.200
16.	Social Marketing of Contraceptives	14.000
17.	Consultancy	5.000
18.	Construction (Population House, RTIs & PWTIs)	149.640
19.	Unallocated	90.550
Sub-total		3212.640
PROVINCIAL		
1.	Provincial, Divisional, District & Tehsil Set-up	1385.880
2.	Family Welfare Centres	1570.573
3.	Mobile Service Units	436.593
4.	Reproductive Health Services	989.541
5.	Involvement of TBAs in Population Welfare Programme	93.723
6.	Family Planning Workers, Supervisors & Training Centres	975.218
7.	Involvement of Health Outlets and Provincial Line Deptt. in Population Welfare Programme	71.486
8.	Involvement of Registered Medical Practitioners, Hakeems/ Homoeopaths in Population Welfare Programme	41.939
9.	Communication Strategy	222.403
10.	Innovatives	20.004
11.	Construction	80.000
Sub-total		5887.360
Grand Total		9100.000

Table-III-11.3

**TENTATIVE YEAR-WISE ALLOCATIONS
(POPULATION WELFARE)**

							(Milion Rupees)
S.No.	NAME OF THE PROGRAMME	1993-94	1994-95	1995-96	1996-97	1997-98	1993-98 (Total)
1	2	3	4	5	6	7	8
1.	Population Welfare Programme, Federal	406.155	600.515	682.513	742.830	780.627	3212.640
2.	Population Welfare Programme, Punjab	443.850	518.920	677.834	712.003	720.791	3073.398
3.	Population Welfare Programme, Sindh	181.740	221.496	292.316	293.138	318.310	1307.000
4.	Population Welfare Programme, NWFP	148.815	168.110	223.288	232.607	232.747	1005.567
5.	Population Welfare Programme, Balochistan	67.263	90.358	107.758	114.468	121.548	501.395
Total		1247.823	1599.399	1983.709	2095.046	2174.023	9100.000

Table-III-12.1

Existing and Ongoing/Physical Target

S.	Sub-Sector	Federal	Provincial	Punjab	Sind	NWFP	Baluchistan	Total
SPECIAL EDUCATION AND REHABILITATION SERVICES								
1.	Existing Institutions/Services Centre (Benchmark 1991)	99	120	48	52	18	2	219
2.	Target of Ongoing & New Institutions Services Centres (Position 1998)	50	78	30	20	20	8	128
SOCIAL WELFARE SERVICES								
1.	Existing Institutions/Services Centres (Benchmark 1991)	51	3016	2183	600	118	115	3067
2.	Target of Ongoing & New Institutions Services Centres (Position 1998)	25	310	150	75	50	35	335
PROMOTION OF VOLUNTARY SOCIAL WORK								
1.	Existing Voluntary Agencies (Benchmark 1991)	196	8184	4088	3301	509	286	8380
2.	Target of New Voluntary Agencies (Position 1998)	300	1200	400	350	250	200	1500
STAFF WELFARE SERVICES								
1.	Existing Institutions/Service Centres (Benchmark 1991)	42	87	19	24	19	25	129
2.	Target of Ongoing & New Institutions/Service Centres (Position 1998)	15	28	10	8	6	4	43

Table-III-12.2

Eighth Plan Outlay for Social Welfare Sector

		(Million Rupees)
S.No.	Name of the Project	Eighth Plan Allocation

A. FEDERAL PROGRAMMES

Major Projects

1.	Special Education Centres at Division/District Levels in Pakistan.	299.000
2.	National Special Education Centres for Integrated Education of Visually Handicapped, Islamabad.	100.000
3.	Special Education Centres at Provincial Headquarters in Pakistan.	100.000

Minor Projects

	Special Education Projects.	200.200
5.	Social Welfare Projects.	50.800
6.	Social Welfare Projects for Promotion of Voluntary Social Welfare Services/Agencies/NGOs.	120.000
7.	Staff Welfare Projects.	130.000

Total (Federal):

1000.000

B. Provincial Programmes:

		8th Plan Allocation				Total
S. No.	Projects/ Programmes	Punjab	Sind	NWFP	Baluchi- stan	
1.	Spl.Edu. & Rehabilitation Projects	70.0	55.0	60.0	15.0	200.0
2.	Social Welfare Projects	65.0	60.0	45.0	25.0	195.0
3.	Promotion of Voluntary Welfare Services/NGOs	30.0	20.0	5.0	10.0	65.0
Total (Provinces):		165.0	135.0	110.0	50.0	460.0

Table III-13.1
Financial Allocation

		(Rs.in million)
1.	National Survey	200.00
2.	Area Development Projects:	2122.00
3.	Health Sector:	
	- Detoxification centres at DHQs/THQs	602.00
	- Drug Information and Detoxification Centres at Teaching Hospitals	238.00
	- Integrated Demand Reduction Project.	98.00
	- Mass Awareness and Community participation.	30.00
	- Support to NGOs	20.00
	- National Research Institute for Drug Abuse:	12.00
	Total for Health Sector:	1000.00
4.	Grand Total for Eighth Plan period:	3322.00

Table-III-14.1

**Eighth Plan Allocation for
Culture, Sports, Tourism & Youth**

(Million Rs)

Sub-Sector	On-going	New	Total
I. Tourism			
i. PTDC	215.506	446.087	661.593
ii. Tourism Division	-	428.407	428.407
Sub-total (I)	215.506	874.494	1090.000
II. Archeology & Archives			
Sub-total (II)	253.000	297.000	550.000
III. Culture			
Sub-total (III)	98.000	106.000	204.000
IV. Sports			
Sub-total (IV)	38.000	418.000	456.000
V. Youth			
Sub-total (V)	93.340	170.000	263.340
Total (CSTY)	697.846	1865.494	2563.340

Table-III-15.1

Summary-Eighth Plan Financial Allocations
(Mass Media)

(Rs. Million)

Agency/Programme	On-going	New	Total
Pak. Television Corp.	56.50	1021.50	1078
P.B.C	296.00	1087.00	1383
A.P.P.	19.00	10.00	29.00
Debate on 8th Plan	-	12.00	12.00
	371.50	2130.50	2502

Table-III-16.1

Surveys/Case Studies During 8th Plan

Agriculture:

- (1) Crops Cutting Objective Survey of 18 important crops under a phased programme.
- (2) Agricultural Input-Output Survey (every 5-year).
- (3) Utilization and Marketing of Agricultural Commodities.
- (4) Mechanization in Agriculture, its impact on manpower, employment, under-employment and substitution of draught power.
- (5) Collection of harvest prices of all agricultural commodities, livestock by species and livestock product.
- (6) Annual surveys of livestock headcounts together with milk yield, output of meat, hides & skins, wool and hair, poultry and poultry meat (survey of cost & yield).
- (7) Survey of private forests, non-forest areas and output of timber and firewood from orchards.
- (8) Survey on rural credit on quinquennial basis.

Fisheries

- (9) Survey of fish potential resource availability in each province.
- (10) Stock assessment survey of fresh water and marine fish to ascertain the actual universe.
- (11) Cost studies separately for marine & inland fishing activity.
- (12) Survey of Biodiversity in Pakistan (Flora & Fauna)

Mining and Quarrying

- (13) Case studies to determine the cost of inputs of various minerals on quinquennial basis.

Manufacturing

- (14) Annual integrated sample surveys of Large Scale Manufacturing and Small Scale Manufacturing Industries.
- (15) Case study on supply and disposition of manufactured commodities by major commodity groups on quinquennial basis.

Construction

- (16) Case studies on the input-output cost of different construction activities other than residential and non-residential buildings.

Transport and Communication

- (17) Survey of mechanized road transport in urban and rural areas quinquennially.
- (18) Survey on non-mechanized road transport in urban and rural areas quinquennially.
- (19) Case study on Inland Water Transport quinquennially.
- (20) Origin destination survey of passengers and goods quinquennially.

Other surveys

- | | |
|---|----------------|
| (21) Health Survey | (Annual) |
| (22) Labour Force Survey | (Annual) |
| (23) Pakistan Demographic Survey | (Annual) |
| (24) Household Integrated Economic Survey | (Annual) |
| (25) National Fertility Survey | (Quinquennial) |
| (26) National Mortality Survey | (Quinquennial) |
| (27) National Nuptiality Survey | (Quinquennial) |
| (28) Pakistan Migration Survey | (Quinquennial) |

DATE SLIP

ive Year Plan

(Million Rs)

Activities	Local	Foreign Assistance	Total
Federal Government			
1. Statistical System & Structure	39.25	1.25	40.50
2. Agricultural & Rural Development	43.75	11.25	55.00
3. Industrial & Mining Statistics	33.45	-	33.45
- BOS (NWFP)	5.57	-	5.57
- BOS (Sindh)	9.30	-	9.30
- BOS (Punjab)	9.30	-	9.30
- BOS (Baluchistan)	3.54	-	3.54
Federal Bureau of Statistics	5.74	-	5.74
4. Energy Statistics	3.71	-	3.71
5. Transport, Storage, Communication & Mass Media	2.01	-	2.01
6. Education & Human Resources	84.87	-	84.87
7. Electronic Data Processing	51.00	-	51.00
Provincial	10.00	-	10.00
Federal	41.00	-	41.00
8. Social Statistics	62.24	-	62.24
9. Price Statistics	3.10	-	3.10
10. Suggested Surveys	74.31	-	74.31
Case Studies and Computerization of National Accounts at FBS.	-	-	-
11. PISTAR	30.00	-	30.00
12. Office Building of FBS at Islamabad	85.76	-	85.76
13. Office Buildings of Ten Regional Offices of the FBS at different Stations	25.05	-	25.05
Total:-	538.50	12.50	551.00

